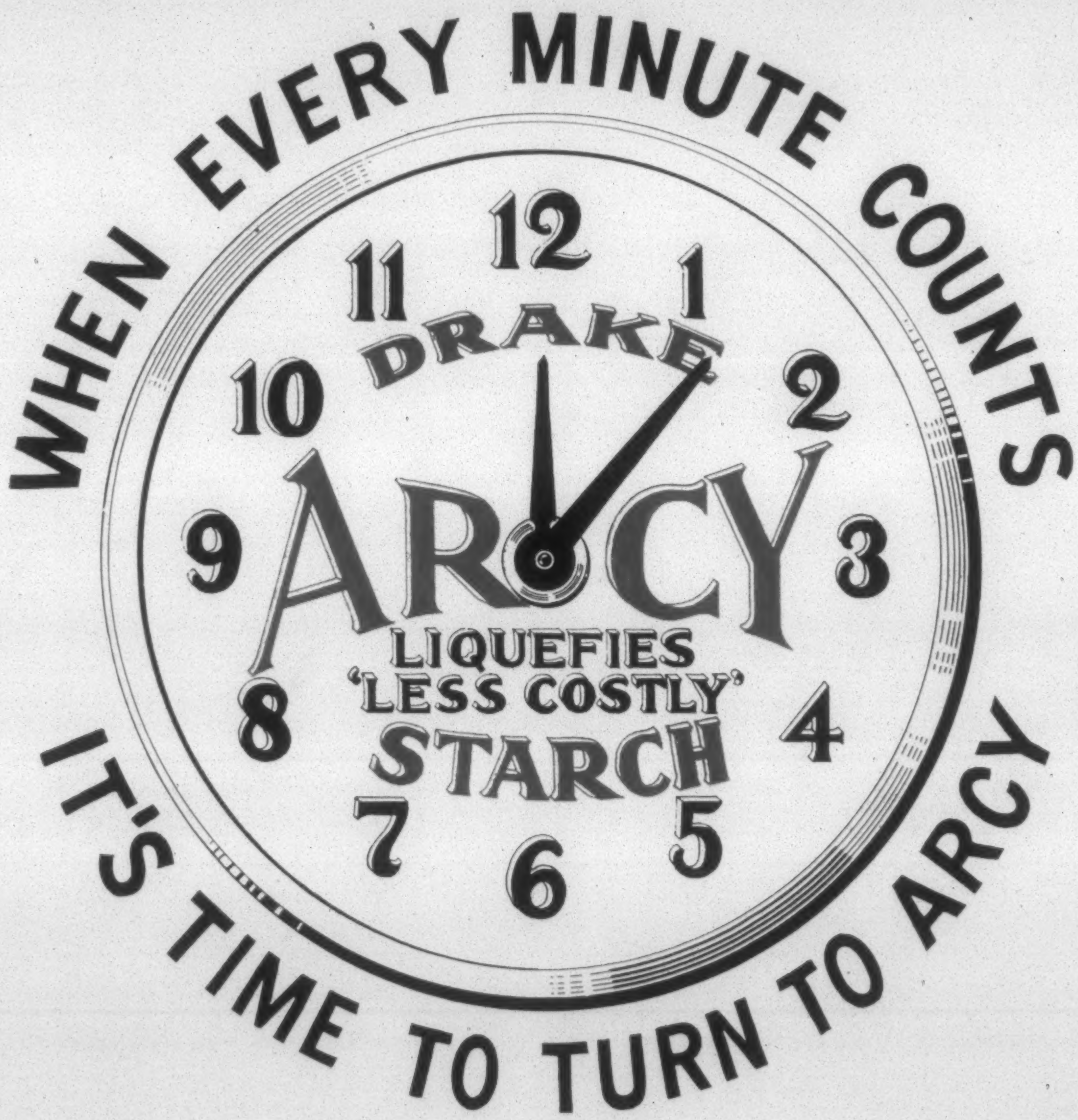
TEXTILE BULLETIN

VOL. 62 APRIL 15, 1942 NO. 4



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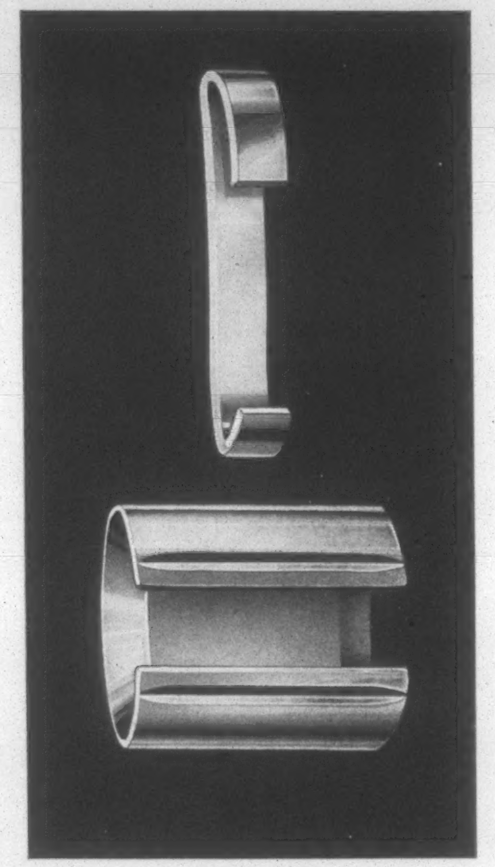

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Published Semi-Monthly by Clark Publishing Company, 218 W. Morehead St., Charlotte, N. C. Subscription $1.50 per year in advance. Entered as second-class mail matter March 2, 1911, at Postoffice, Charlotte, N. C., under Act of Congress, March 2, 1897.

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Information about winding designed to show improvements
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WINDING BOBBINS OF GLASS YARN (No. 90 Winder)

While we feel that more experience is necessary before we can make definite recommendations, the following suggestions will be helpful to mills starting out to weave fabrics with glass yarn. The two principal objectives of these suggestions are:

1. Elimination of friction that will cause *wear*, by passing the yarn, while it is under tension, over *revolving* contact points, rather than stationary.
2. Elimination of *static*, by replacing all fixed porcelain or glass contact points with *metal* or *revolving* contacts. Of course, a high percentage of humidity should be maintained in the winding room.

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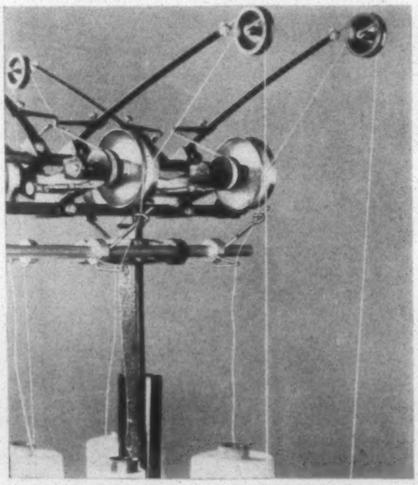
When winding overend from cones, the Controlled Rotating Disc Tension makes it possible to operate at higher speeds than with unrolling spools.

This tension consists of two discs, fixed face to face, around which the yarn makes one complete wrap. Tension draws the yarn into the bottom of the V slot, with the result that the discs turn with the yarn, without friction or chafing. The amount of tension applied is controlled by the band attached to the Compensator Arm; this acts as a brake on the discs when tension is released and the Compensator Arm goes up.



The discs rotate with the yarn, and tension is controlled by the strap attached to the Compensator Arm. (The guard around the Shelf Bracket prevents yarn ballooning off a full cone from striking the bolts and nuts.)

Bobbin Diameter

Due to the variation in tension between the barrel of the bobbin and the outside diameter, it is recommended that the full diameter be not more than twice the empty bobbin diameter.

WINDING BOBBINS FOR NYLON FABRICS (No. 90 Winder)

Uniform tension is vital for the successful winding of nylon yarns and minimum tension is desirable. Since nylon generates static when in contact with porcelain or glass, contact points should be metal.

Finger Tension

The regular steel Finger Tension has been giving good results. A maximum of twenty grams of tension is recommended to obtain a firm bobbin for satisfactory weaving.

Because of the minimum tension with which nylon is wound, it is important that the cord holding the tension weights be permitted to slide without friction over the pin or hook mounted on the Tension Bracket. Most No. 90 brackets have a wide casting to support this cord; this should be replaced with a finished pin or revolving collar to allow the cord to slide easily.

Thread Guide

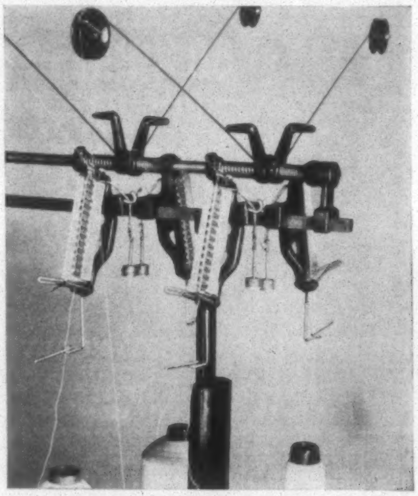
The Porcelain Thread Guide need not be changed, since, with overhead supply, the slight contact between yarn and guide is not enough to cause trouble. Underneath supply should not be used, because the additional wrap of yarn around the guide will create static.

Seven winds are recommended for nylon, with a spindle speed of 2250 to 2500 r.p.m. Full bobbin diameter should not be more than twice the empty bobbin diameter.

Better control of tension is obtained by winding from cones instead of from spools, since there is too much variation in tension from outside to inside of the spool (particularly when drawing from under the head).

Humidity

Nylon reacts critically to changes in humidity. Humidity should be as high as possible to reduce troubles due to static. Most mills are operating winding rooms with less than 65% relative humidity, but it will help to run with high humidity.



Some tension brackets have a porcelain guide directly above the tension. It is best to replace this by a metal pigtail guide similar to that shown in the photograph.

Better results in weaving and better quality of fabric can be obtained by letting nylon yarn stand for conditioning in a humidified area for a period of 18 to 24 hours immediately before winding. Finished bobbins should also be conditioned for 18 to 24 hours in the weave room immediately before weaving. Experiments can be made to determine the conditioning time that gives the best results.

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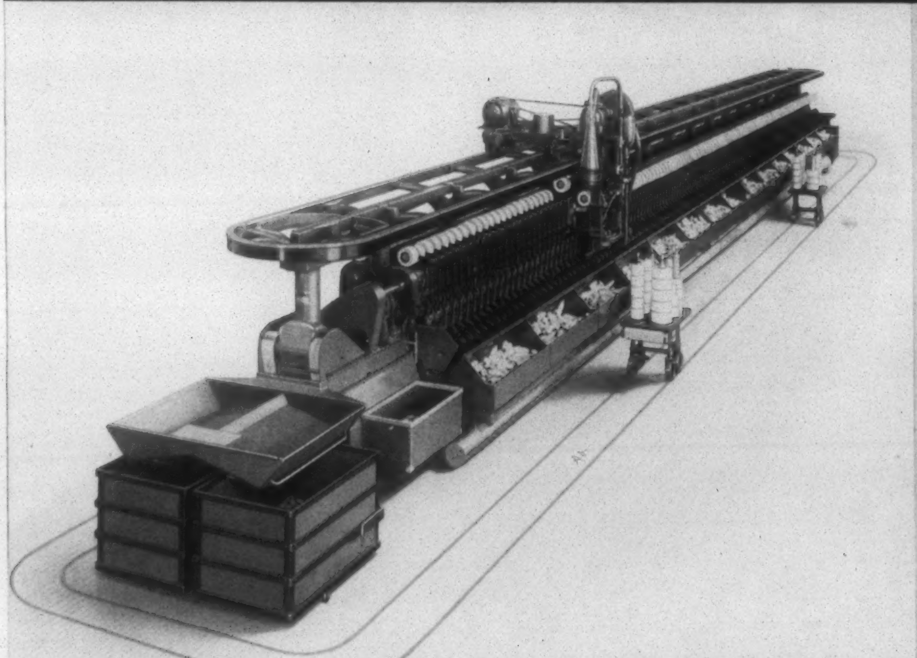

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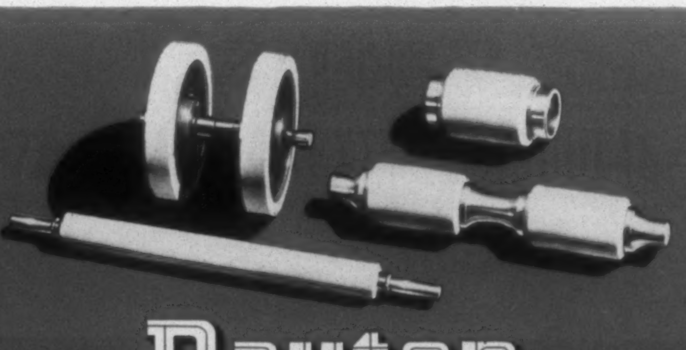

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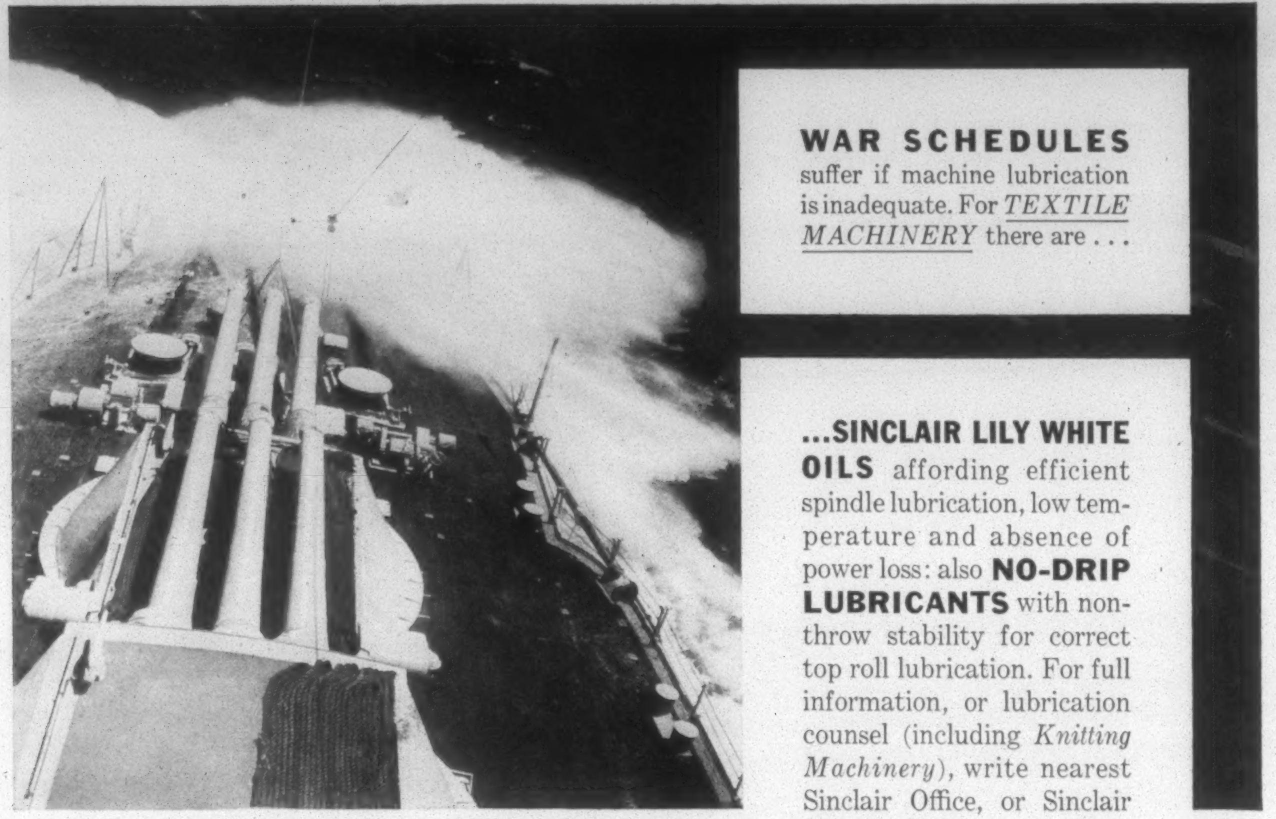

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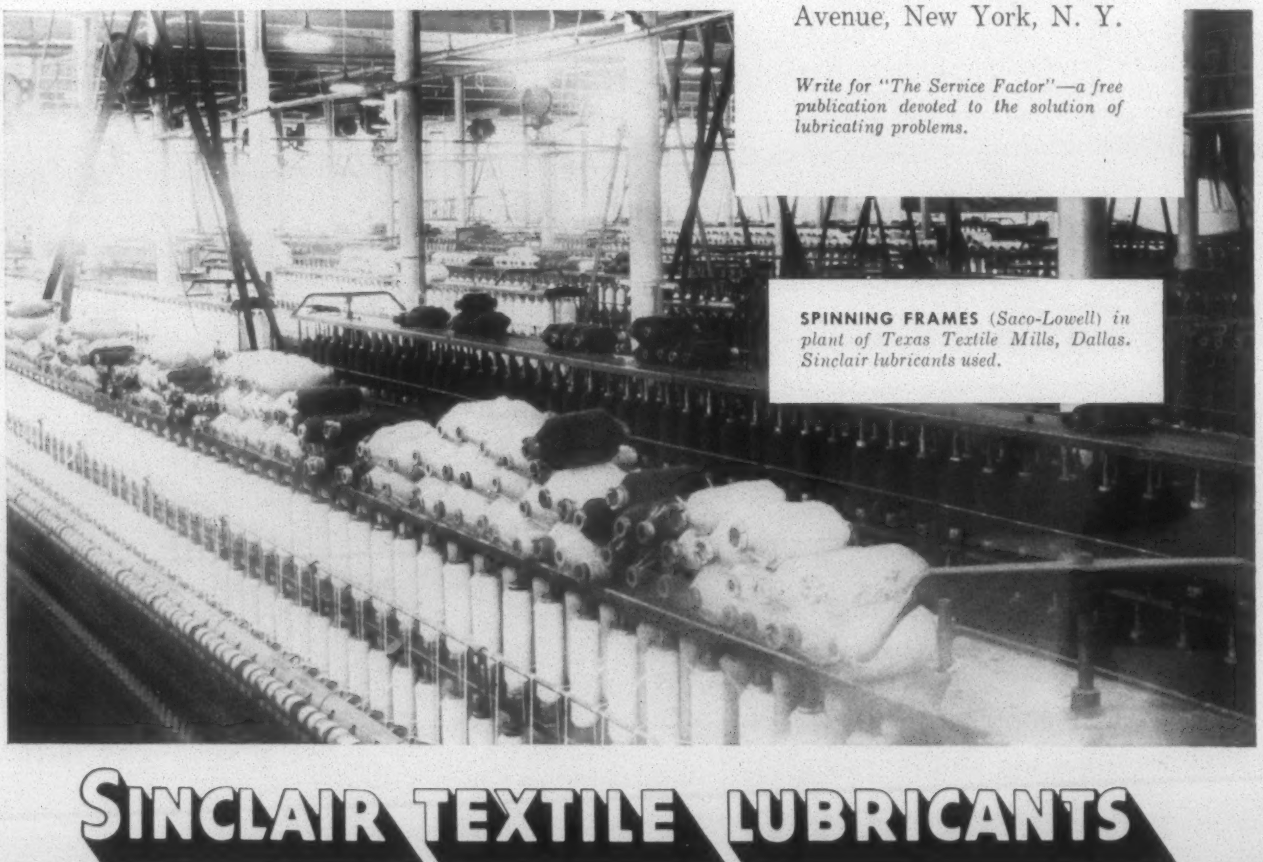

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TEXTILE BULLETIN

MEMBER AUDIT BUREAU OF CIRCULATIONS

Vol. 62 April 15, 1942 No. 4

A Blunt Discussion of Labor Relations

Andrew Laird

DR. RUTHVEN, President of the University of Michigan, in discussing the current struggles between individual freedom and regimentation, said that "the safety of democracy in America requires not only an immediate tightening of its defenses, but more importantly, a vigorous offensive, involving an improvement of practices. . . . . .

"Our people must become intolerant of ignorance, greed and injustice. They must reaffirm their belief in the equality, brotherhood and moral responsibility of man, examine objectively our successes and failures, as a nation, and dedicate their lives anew to the task of improving our efforts to govern ourselves."

These quotations are good to keep in mind in thinking of the continuing conflict in the field of labor relations. This conflict, which had its origin in ignorance and greed and injustice, continues to be motivated by these factors, grown more powerful as the opposing forces have grown.

Force Cannot Solve Problems

This conflict cannot be settled by law or by the power of force. Arbitraments of such a conflict can finally produce an armistice. Blind and unintelligent force has never settled anything. Intelligence, unselfishness and justice are the arbiters which finally mediate a lasting peace.

Opposing forces storming the halls and corridors of Congress canont secure peace. The boards and commissions formed out of partisan political groups cannot formulate plans for industrial peace. They, too often, consider prejudices and political expediency in making their decisions. They, too often, consider only the economic problems involved and fail to see or comprehend the clashing philosophies which are so powerfully active. They are, often, too fearful to decide in any manner except as that their decision will embarrass them least.

In our society, there are at present too much ignorance, greed and unintelligent emotionalism attempting to work out progressive plans for human guidance. Societal engineering, although it has made rapid strides in establishing its values, is still regarded by too many people as a professional fad.

Every one regards himself as an expert in interpreting the motives of mankind. Thos. G. Spates, Director of Industrial Relations of the General Foods Corp., says that there are three general professions devoting themselves to the subject of human relationships. The first of these professions is the law, the second is medicine, and the third is the profession of personnel administration, or societal engineering.

We do not attempt to plead our own case in court or to enter into contracts without the lawyer's advice; we do not attempt to diagnose and treat our own illness, or those of our family. We consult the doctor and follow his advice rigidly. In the field of human relations in industry, no one is consulted because every man is an authority on handling people.

Some one could be an authority in every industry, if he would spend as much time in preparing for the job of industrial engineering as the lawyer or the doctor has spent in preparing for his profession. The drug clerk or prescriptionist handles medicine every day and yet no one seriously ill would want a drug clerk or prescriptionist to diagnose and handle his case.

Leaders Need Specialized Training

Too many industrialists, on the one hand, and too many leaders of labor on the other, are woefully incapacitated in trying to interpret industrial relations. This statement may not be true in specific instances but it is true as a general statement. If this is a true statement, that it requires a person scientifically trained in human engineering to understand the motives and actions of people, is it any wonder that so many conflicts occur again and again; is it any wonder why, when these conflicts are once settled, they do not stay settled?

The statements made so far are a serious reflection on no one. It is a common and accepted erroneous fact of life that any one can handle the humanities of people. Again most people in industry today are too busy with other things to give proper study and consideration to this problem.

Industry for this reason has failed to keep abreast of the times. It has failed to direct its industrial relations policies sufficiently in keeping with the growth and demands of society. While it is and has been progressive there has been a social lag on the part of some of its members that has made some compulsions and directions necessary. We shall not go into any controversial statements to prove this. We shall only mention a few legal measures to show that there has been a social lag on the part of some members of the industrial group.

We shall mention the Workman's Compensation Law passed in Wisconsin in 1911 and then a nation-wide sweep of this Act. The Child Labor Amendment declared unconstitutional, the National Recovery Act, the Fair Labor Standards Act, the Walsh-Healy Act, the Social Security Act and dozens of alphabetical aids in executing so-called social ideas—the Department of Labor, the National Mediation Board, the War Labor Board and many State laws and regulations compelling observation and compliance.

In making the above statements, it would be manifestly unfair to say that all members of industry lagged until they were driven into action. In every industry, there have always been industrial statesmen—men who have been motivated by intelligence and social ideals. There have been too many of the other type and the lag became so great that compulsion had to be used and often this has proven unsatisfactory.

Labor Leaders Economic and Political

Labor, in its rise to its place of prominence, has violated, at some time, practically every law of societal or industrial engineering. It has been dominated almost entirely by the economic and the political. Man is a social being first and foremost and the social phase of labor, as it fits itself into the pattern of life, has been studied only incidentally, if considered at all. Just as many of the old methods of management have become antiquated and outmoded, so have many of the policies of labor become antiquated and outmoded. The leaders, by and large, have little or no conception of social values.

Labor is a more recent arrival in the political field as an influential and determinative factor. It has in its ranks many of the finest people in the world, but as yet many lack the finesse and art of social appreciation, in legislation, hence they depend on the so-called leaders to represent them politically. Even industrial leaders and managers, with their longer experience than labor in the art of government, too often, forget the social influence of business and motivate their acts politically and economically.

This article is an earnest attempt to be fair and constructive in its endeavor to point to the causes and cures in the industrial conflict.

Management, in its organization, has been weak in that it has failed to plan for the proper handling of labor problems. It regarded them for too long a period as of no great importance and as a necessary evil in industry. Because of its indifference to them, or because of its lack of intelligence in handling them, labor in many cases has decided that it cannot get justice within its own organization, therefore, it must look outside.

On the outside of any organization, there are always people who have plans and panaceas for all of the ills and obliquities of mankind. Some serious and able men who really appreciated the problems of labor, set to work to solve them. Soon these able leaders were joined by other leaders who saw in the solutions a fine field for exploitation and graft and political power, and personal aggrandizement.

The original charters and purposes of labor organizations were fine in their sentiments and noble in their purposes. However, when economic selfishness and political power became dominant, too often these sentiments and purposes were forgotten. Too often, a solution, which should bring a coordination of factions and a co-operation of purposes, intensifies the breach and narrows the possibilities for co-operation.

Under the emotionalism of the "New Deal" and the exigencies of the war, reason and righteousness are sometimes hard to justify in the present plans and purposes of labor. Efforts that do not remove prejudices, and promote intelligence; efforts that do not produce friendly and unselfish co-operation are questionable in any social problem.

Too many people think that this country should pattern its labor policies after those of England or Sweden, or some other foreign nation. The United States is a democracy operating under a Constitution and a Bill of Rights, the principles of which make it have a different social outlook on life from any other nation in the world. Its broad and expansive territory, its physical diversity, its heterogeneity of population—all indicate the impossibility and the impracticability of regimentation. Freedom of speech, freedom of assembly, freedom in action are natural expressions in the desires of mankind.

Exploitation By Labor Masters

If some people have thought that the employers of labor restricted these freedoms, and perhaps in some cases they have, then it is equally true that the regimentation and control by the labor masters now are more restrictive than those of the employers ever were. No exploitation of the employer has ever approached the exploitation demanded and secured by many of the labor leaders today. I refer to charges for interviews, initiation fees and dues that must be paid regardless of the Bill of Rights. There are also imbedded in their philosophy, principles which unlawfully limit a man's right to work. This is distinctly undemocratic.

Many of the rules and regulations and much of the regimentation of the members of labor organizations, violate the principles of a democracy and a free people.

Labor organizations, in this period, have approached a totalitarian for mof government. There is no democracy in the rank and file. Those workers who subscribe to the present policies of labor organizations are under the supreme control of dictators as completely as any of the foreign people. Such principles as are now employed are destructive of democratic ideals and the American Way of Life.

It may be that labor organizations, as they are now constituted, have outgrown their day of usefulness. They began as corrective organizations and now they are political and financial organizations. The fact that within the ranks of organized labor there is much dissension, the fact

(*Continued on Page 56*)

The Manufacturing Quality of Irrigated Cotton

By Malcolm E. Campbell
Senior Cotton Technologist
U. S. Department of Agriculture

FOR more than 15 years, the producers and shippers of irrigated American upland cotton have been faced with the problem of inducing American spinners to use and like such cotton. That they have not been entirely successful is illustrated only too clearly by the relative prices of irrigated and rain-grown cotton when landed at Southeastern and New England mills. For similar grades and staples, irrigated cotton has been bought for prices ranging from 100 to 300 or 400 points below those paid for rain-grown cotton.

Is this situation due to whispering campaigns instituted by unscrupulous persons, or can it be said that it represents a true comparison of the manufacturing quality of the two growths? At the request of both the growers of irrigated cotton and a number of manufacturers, the U. S. Department of Agriculture has endeavored to unearth the facts of the case. It is my purpose now to tell you some of the things that the Department has found out about the manufacturing quality of irrigated cotton, and after having taken stock of the matter, to suggest ways and means that may assist you in solving your problem.

At this point, it should be brought out that the term "irrigated cotton" is an inadequate, if not unfortunate, choice of words to use in referring to the cotton produced in the Southwest. It bears an inference that the mere-fact that the water required for the growth of cotton out here comes from irrigation ditches rather than directly from the sky, is solely responsible for all the good or bad features of any bale of cotton produced. This, of course, is not true, as we all know that temperature, sunlight, type of soil, variety of seed, ginning efficiency, and other factors all affect the quality of cotton. Then, too, it is well to remember that practically all cotton produced in Egypt is grown under irrigation, and in general this cotton seems to have been well received.

In spite of these facts, however, the upland cotton grown in California, Arizona, New Mexico, and the upper Rio Grande Valley is called "irrigated cotton," in keeping with the true American custom of assigning catchwords without always considering the effects. Because the term is so widely used, we shall continue to speak of "irrigated cotton" in our present discussion.

Sources of Information

Two methods have been employed in an effort to obtain an adequate answer to the question, "How does irrigated cotton compare in manufacturing quality with rain-grown cotton?" The first method consisted of carefully conducted laboratory tests, made by experienced technologists and under controlled conditions, and the second, of obtaining first-hand information directly from manufacturers who have used irrigated cotton. Each method has its shortcomings, as well as its advantages. In many respects, however, one possesses what the other lacks, and a combination of the two methods has appeared to the Department to offer a fair opportunity of obtaining the desired information.

In a laboratory test, it is not practicable to make more than a small fraction of the materials that could be made from irrigated cotton. And in obtaining information from a manufacturer about his experience with such cotton, two facts must be kept in mind: First, no matter how large the mill or how experienced the manufacturer, he cannot have tried all kinds of cotton—even all kinds of irrigated cotton. Second, it must be realized that at least some mill men do not wish to seem too enthusiastic about a cotton that is cheap, when they know that too much enthusiasm might tend to raise the price of it.

Some of you may be familiar with the laboratory tests made by the Department on material from the 1939 crop. A description of the test methods used and the findings obtained have been published and for our purpose it will not be necessary to review them in detail. As each point relating to manufacturing quality is considered, the results of the test will be discussed, and pertinent information obtained from manufacturers will be compared with the laboratory findings.

As opportunities were presented during the past few weeks, visits were made to several mills, both in the Southeast and in New England, and the opinions of managers, superintendents, and research men were obtained with regard to irrigated cotton. Naturally, the identity of these mills must not be disclosed, and I shall avoid giving out definite details that might lead to their identification.

Results of Tests and Discussions

Let us now discuss the facts as brought out by the tests and in the talks with manufacturers. This may logically be done by considering some of the so-called prejudices that mill men have voiced in the past regarding irrigated cotton. To be specific, it has been said that irrigated cotton is wasty, irregular, and weak; that the yarns spun from it are rough and neppy; that the fabrics are of poor appearance; that the cotton is "hard to spin"; and that it

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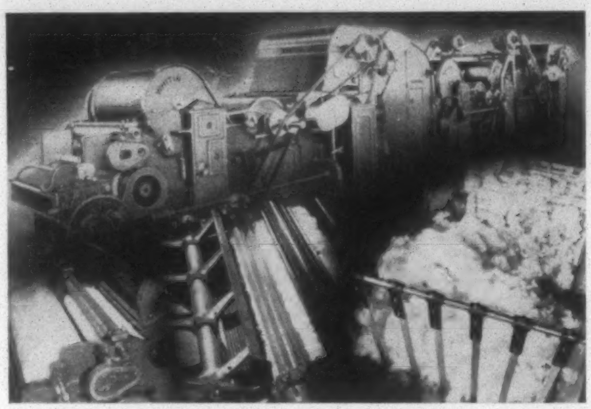
*An address before the Nineteenth Annual Convention of the California-Arizona Cotton Association, Los Angeles, Calif.

does not take dye properly. We shall consider these factors about in that order, which is not necessarily the order of their importance.

(1) Is irrigated cotton wasty? All cotton, of course, must pass through cleaning machines, which remove as waste most of the foreign matter, such as leaf, motes, sand, and so on, as well as some fiber, comprising nep or tangled fibers, and short fiber. But is irrigated cotton abnormally wasty, as compared with rain-grown cotton? The Government tests showed some difference between the two growths, but these differences were not clear cut nor always in the same direction. That is, the rain-grown cotton yielded less picker and card waste, grade for grade in the 1-1/16 and 1-3/32-inch lengths, and the irrigated cotton yielded less waste in the 1⅛-inch length. In regard to this amount of waste, the California cotton in most cases was between the irrigated cotton from the Arizona-New Mexico-West Texas area and the rain-grown cotton from the Delta.



Few cotton mills have records to show picker and card waste percentages. They do, of course, keep careful records of the input and output, or the quantity of raw cotton consumed and the weight of the goods manufactured. These records would reflect any important differences in the amount of waste removed by the cleaning machines.

In our discussions with manufacturers, we did not hear any complaints that the irrigated cotton was more wasty. One manufacturer who uses irrigated cotton for combed fabrics was extracting an average quantity of comber waste from his cotton, with excellent results. The percentage of comber waste that a mill extracts is objective; that is, it is predetermined and controlled, to produce the desired cleanliness in the product.

To summarize our information regarding the relative wastiness of irrigated and rain-grown cotton, we may say that the relationship appears to vary somewhat, but no information was obtained from mills to indicate that irrigated cotton was especially objectionable in this respect.

Is Irrigated Cotton Irregular?

(2) Is irrigated cotton irregular? The term "irregularity" as applied to cotton has a number of meanings or implications. For example, it may be used to indicate variation between shipments of cotton, or it may refer to variation among bales in a given shipment, or again, among different portions of a single bale. It may refer to staple length, or to quality in general.

With such a variety of meanings for a question, the difficulties of giving a simple, definite answer are obvious For our present purpose, however, we shall assume that irregularity refers to staple length within an even-running lot of carefully classed cotton such as any mill would like to have.

The cotton used in the laboratory tests can be considered as falling in this category. These tests showed that the irrigated samples were slightly but rather consistently less unform in length than the rain-grown samples. The Delta samples were the most uniform, with the California samples second, and the Arizona-New Mexico-West Texas samples third.

From available information it is not possible to say whether the slightly greater length variation of the irrigated cotton samples was due to differences within and between cotton bolls and plants in a field, or whether it was due to inefficiency in the operation of the gins.

It is clear, from this discussion, that the answer to the question is nearly as variable as the subject. In any event, it can be said that this element of length variability is of secondary importance and by itself should give no real cause for concern.

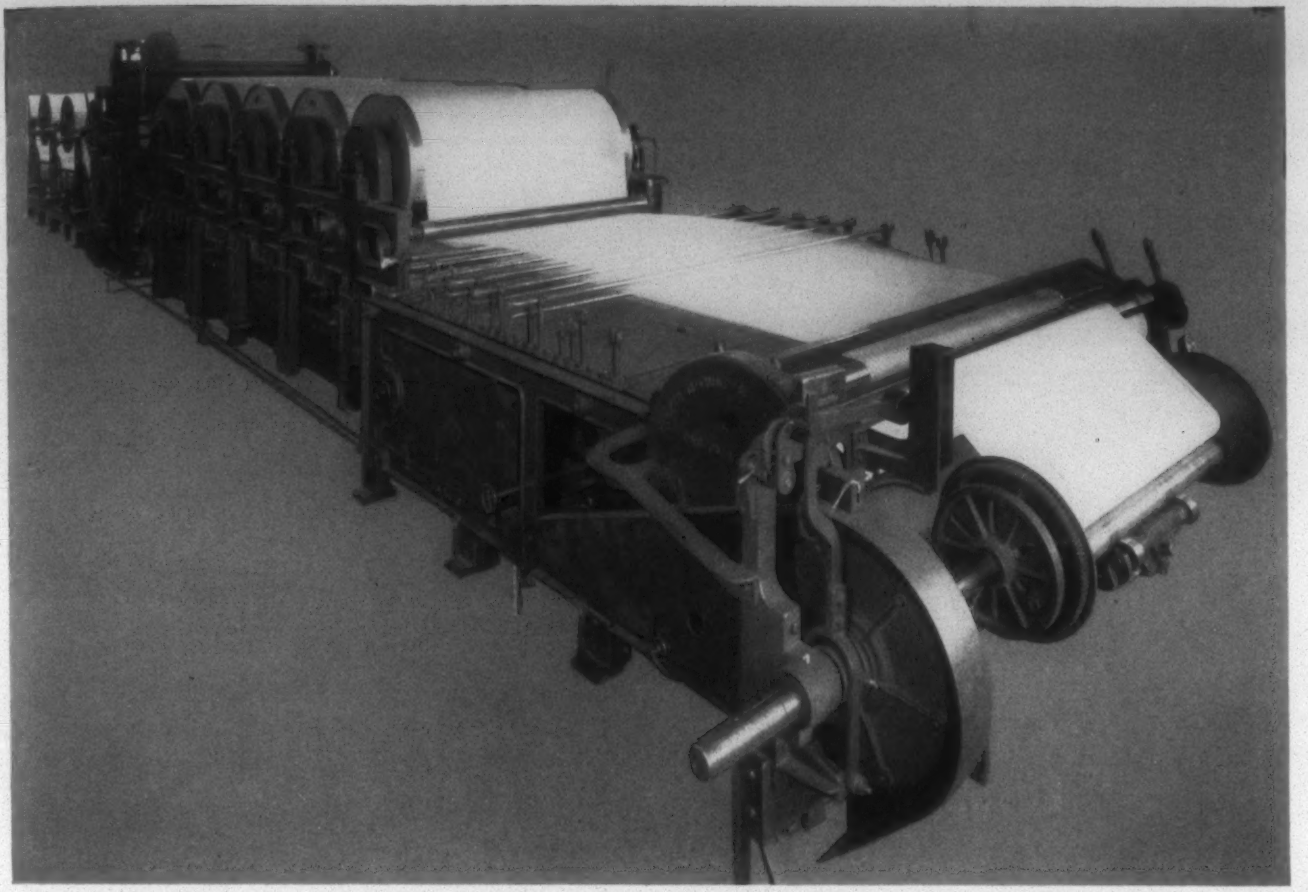
Is Irrigated Cotton Weak?

(3) Is irrigated cotton weak? This question can be considered as referring to the strength of the fibers themselves or to that of the yarns, cords and fabrics made from them. Both angles of the subject are probably important enough to be discussed at some length.

In regard to yarn and cloth strength, most cotton mills fall into one of two groups: ((1) those that must meet definite strength specifications, such as manufacturers of tire cord, mechanical fabrics, and (of especial importance at present) fabrics of all kinds for war orders; and (2) those that do not have to meet any strength specifications. The importance of strength to the first group is obvious. In normal times, most mills, however, fall in the second group, and all they want in a cotton is one that will "run well," and of which there is an ample supply at a low price.

In our discussions with manufacturers we got a variety of opinions regarding the strength performance of irrigated cotton. In two large mills it was stated definitely that to meet specifications with irrigated cotton, they had found it necessary to use staples from 1/16 to 3/32-inch longer than the rain-grown cottons they were using satisfactorily. This, they said, killed any price advantage that might otherwise have attracted them to irrigated growths.

(*Continued on Page 48*)



COCKER HIGH SPEED SLASHER FOR COTTON YARNS

Illustrated is the New Cocker Nine Cylinder High Speed Slasher for Cotton Yarns.

Machine has 30″ diameter Cylinders with Rotary Packless joints, Graduated Drive permitting speed changes without over-run on Beams or strain on yarn. Patented Automatic Friction Control—Finger Tip Tension Control—Syphon Condensate removal with Individual Traps on each Cylinder. Heavy Vibration Eliminating Frames. Counter Clocks for instant Stretch Calculations—Cut Marker—Cut Marker Indicators—Speed Tachometers—Combs and Comb adjustments—Motor and Steam fittings.

For better weaving Warps made efficiently and economically use COCKER WARP PREPARATION EQUIPMENT.

COCKER MACHINE & FOUNDRY COMPANY

GASTONIA **NORTH CAROLINA**

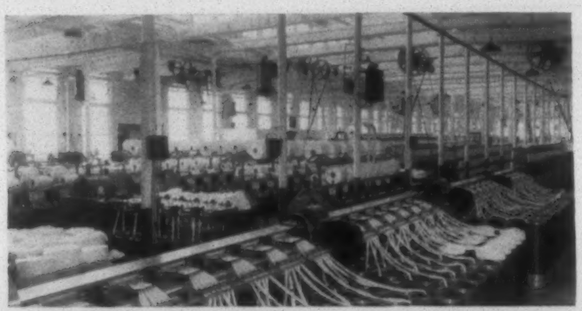
Control of Package Size Improves Strength and Evenness of Yarn

KEEPING yarn numbers uniform in size and breaking strength is a problem that requires constant attention, even in the best equipped and best managed mills. The relation of the package size at each of the preparatory processes, starting at the picker, to the eventual uniformity of the finished yarn is much more important than is generally recognized.

If the package is too large, an excessive amount of twist is necessary to prevent breaking back in creels of the next process. By proper package sizing, a normal amount of twist can be used, and a closer roll setting maintained, resulting in a strong, even yarn.

In mills producing a variety of cotton yarn numbers, troubles in later processes can be reduced if the weight per yard of each lap is carefully determined in relation to the yarn number to be made from it and the quality of the cotton used. A relatively heavy lap should be prepared for rapid production of coarse yarns, while a lighter lap will give best results in the slower production of fine yarns.

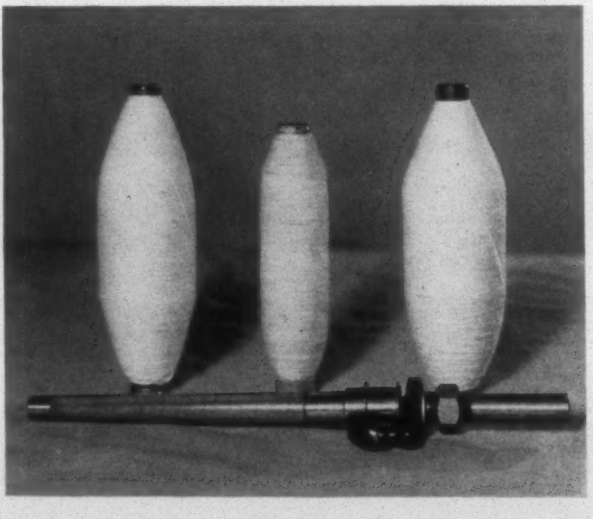
Unless conditions in the picker room are under unusually precise control, however, it is advisable to keep the lap weight not less than 12 oz. per yard, since on any lighter lap it is almost impossible to prevent the development of light and heavy places which cause uneven yarn in later processes.



For coarse yarns, a lap weight of 14 oz. to 18 oz. per yard is recommended, depending on the speed of production and the weight of sliver desired at the card. For lighter sliver and slower production a 12 oz. lap will give the best results.

Finished laps should all have the same total weight, regardless of the weight per yard and the difference in yardage. If a lap of 16 oz. to 18 oz. per yard is built up to the same yardage as a lap of 12 oz. per yard, the package is too bulky for efficient handling. The outside layers usually become so roughened that they must be wasted, or, if they are used, uneven yarn is almost certain to result. It is a relatively simple matter to set up change knock-off gears for the various weights per yard of laps being run, keeping the total weight of the laps uniform.

On the card, unless the sliver being made is less than 35 grains per yard, it is advisable to use a 12-inch can to reduce the frequency of doffing and piecings, since all piecings cause uneven work. This same suggestion applies also to combers.



When laps are being prepared for combers, the weight per yard should be established by tests made to determine what weight will run best on the type of comber being used. The weight should be as heavy as the comber can handle efficiently and as the yarn being made will allow. Too light a lap will cause an unnecessary loss of production.

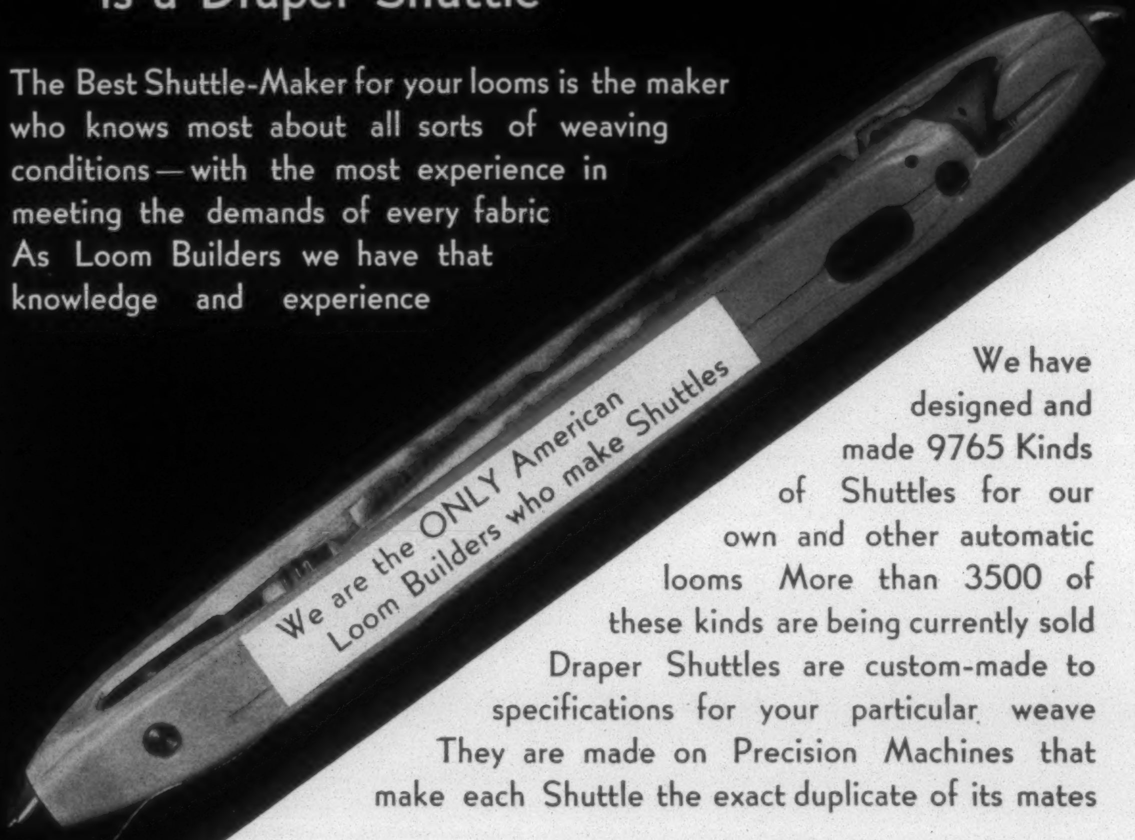
At the drawings, it is advisable to use as large a can as practicable—limited, of course, by the floor space available and the weight of the sliver. Here again, the larger the package, the fewer the piecings and resulting unevenness on slubber roving.

(*Continued on Page 46*)

The Best Shuttle

for Automatic Box Looms
is a Draper Shuttle

The Best Shuttle-Maker for your looms is the maker who knows most about all sorts of weaving conditions — with the most experience in meeting the demands of every fabric As Loom Builders we have that knowledge and experience



We have designed and made 9765 Kinds of Shuttles for our own and other automatic looms More than 3500 of these kinds are being currently sold Draper Shuttles are custom-made to specifications for your particular weave They are made on Precision Machines that make each Shuttle the exact duplicate of its mates

In the best equipped Shuttle-making plant in America each Draper Shuttle must pass through the hands of from 161 to 219 machine operators and skilled workers and through from 96 to 124 machines

A Good Shuttle is
First Aid to the Weaver

DRAPER CORPORATION

Hopedale Massachusetts

Atlanta Georgia Spartanburg S C

New Textile Minimum Wage Now 40 Cents Per Hour

PURSUANT to the recommendation of Industry Committee No. 39, Administrator Walling of the Wage and Hour Division on April 2nd signed an order establishing a 40-cent wage minimum for the textile industry, as defined therein, effective April 20, 1942.

Thus, in the space of three and one-half years since the Fair Labor Standards Act first became effective, the statutory wage minimum for the textile industry has advanced from 25 cents to 40 cents per hour, reaching the maximum authorized under the Act.

The text of this latest wage order, eliminating the introduction, is given below.

Part 619—Minimum Wage Rate in the Textile Industry.

Wage order in the matter of the recommendation of Industry Committee No. 39 for a minimum wage rate in the Textile Industry.

(Introduction omitted)

Now, therefore, it is ordered, That:

§ 619.1. *Approval of recommendation of Industry Committee.* The committee's recommendation is hereby approved.

§ 619.2 *Wage Rate.* Wages at a rate of not less than 40 cents per hour shall be paid under section 6 of the Act by every employer to each of his employees who is engaged in commerce or in the production of goods for commerce in the Textile Industry.

§ 619.3 *Posting of Notices.* Every employer employing any employees so engaged in commerce or in the production of goods for commerce in the Textile Industry shall post and keep posted in a conspicuous place in each department of his establishment where such employees are working such notices of this order as shall be prescribed from time to time by the Wage and Hour Division of the United States Department of Labor.

§ 619.4 *Definition of the Textile Industry.* For the purpose of this order the term "Textile Industry" means:

(a) The manufacturing or processing of yarn or thread and all processes preparatory thereto, and the manufacturing, bleaching, dyeing, printing and other finishing of woven fabrics (other than carpets and rugs containing any wool) from cotton, flax, jute, other vegetable fiber, silk, grass, or any synthetic fiber, or from mixtures of these fibers; or from such mixtures of these fibers with wool or animal fiber (other than silk) as are specified in paragraphs (g) and (h); except the chemical manufacturing of synthetic fiber and such related processing of yarn as is conducted in establishments manufacturing synthetic fiber;

(b) The manufacturing of batting, wadding or filling and the processing of waste from the fibers enumerated in paragraph (a);

(c) The manufacturing, bleaching, dyeing or other finishing of pile fabrics or cords (except carpets and rugs containing any wool) from any fiber or yarn;

(d) The processing of any textile fabric, included in this definition of this industry, into any of the following products: bags; bandages and surgical gauze; bath mats and related articles; bedspreads; blankets; diapers; dishcloths; scrubbing cloths and washcloths; sheets and pillow cases; tablecloths, lunch-cloths and napkins; towels; window curtains; shoe laces and similar laces;

(e) The manufacturing or finishing of braid, net or lace from any fiber or yarn;

(f) The manufacturing of cordage, rope or twine from any fiber or yarn including the manufacturing of paper yarn and twine;

(g) The manufacturing, or processing of yarn (except carpet yarn containing any carpet wool) or thread by systems other than the woolen system from mixtures of wool or animal fiber (other than silk) with any of the fibers designated in paragraph (a), containing not more than 45 per cent by weight of wool or animal fiber (other than silk);

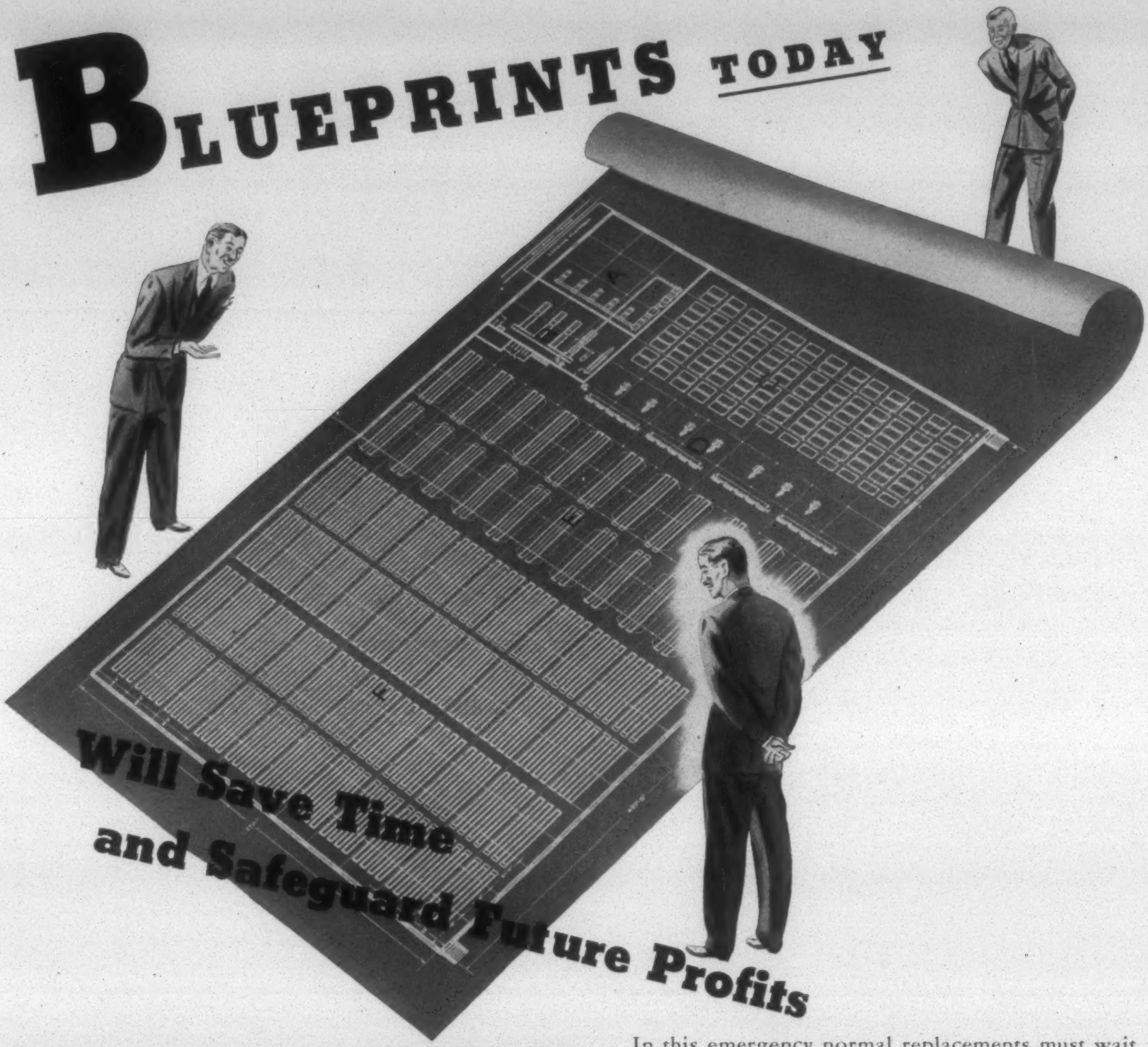
(h) The manufacturing, bleaching, dyeing, printing or other finishing of woven fabrics (other than carpets and rugs) from mixtures of wool or animal fiber (other than silk) containing not more than 25 per cent by weight of wool or animal fiber (other than silk), with any of the fibers designated in paragraph (a), with a margin of tolerance of 2 per cent to meet the exigencies of manufacture;

(i) The manufacturing, dyeing, finishing or processing of rugs or carpets from grass, paper, or from any yarn or fiber except yarn containing any wool but not including the manufacturing by hand or such products.

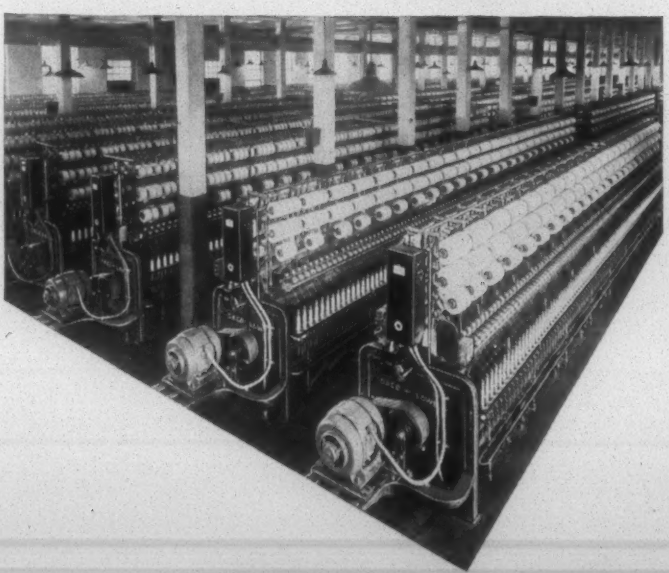
§ 619.5 *Scope of the Definition.* The definition of the Textile Industry covers all occupations in the industry which are necessary to the production of the articles specified in the definition, including clerical, maintenance, shipping, and selling occupations: *Provided, however,* That this definition does not include employees of an in-

(*Continued on Page 52*)

BLUEPRINTS TODAY



Will Save Time and Safeguard Future Profits



In this emergency normal replacements must wait . . . but the preliminary studies, plans and specifications for new and better equipment which will be urgently needed later should be started without delay. It is not too soon to "blueprint" your future requirements and to prepare for improvements which will be essential to your security with the return of a revived competitive market. Farsighted planning to replace equipment which has become inefficient and costly to operate and maintain will save valuable time and safeguard future profits.

Our engineers are anxious to keep you in close touch with improvements in methods and equipment . . . and to show you how these new developments can be incorporated in your plans for the future.

SACO-LOWELL SHOPS

60 Batterymarch Street, Boston, Mass. Charlotte, N.C. Greenville, S.C. Atlanta, Ga.

Report on

THE MOST EFFICIENT WORK WEEK

The Industrial Relations Section of Princeton University, following a canvass of employers, reported that under certain conditions the 60-hour week might result in the maximum output with no noticeable effect on workers. With ample facilities and ample skilled workmen, the maximum output is obtained by a 48-hour week, three shifts per day, six days per week. While these observations did not apply specifically to textiles, they are interesting from an industrial production standpoint, whatever the industry. The report states:

FOR maximum output or productivity, when ample facilities are available but where there is a shortage of skilled workmen, use the 60-hour week of two shifts per day, six days per week, ten hours per shift. We have found that employees can keep to this work week indefinitely, but that absences and accidents will increase. For maximum productivity when both ample facilities and skilled workmen are available, use the 48-hour week, three shifts per day, six days per week.

Increase in Absences At Long Hours

The work week of 60 hours plus seems to cause not only a sharp increase in absences and accidents and a rapid decrease in individual productivity but other unfortunate complications as well.

Some employers reported that perhaps the most serious effect of working more than 60 hours, even for a short time, is that the physical fatigue and careless work habits that stem from the long week continue even after hours are reduced.

One official of a company that had been on a 70-hour week, but is now cutting down to 52½ hours as rapidly as additional men can be trained, related:

"The shorter work shift plus incentive above quota brings greater production per hour; no reduction in accidents so far; absences (still) are terrible, and we cannot see any improvement."

A number of companies pointed out to questions from the Princeton University canvass that the danger of low morale increased whenever hours are excessive. One condition of bad morale was described by a company that had to work its employees for a number of months on schedules as long as 80 hours per week.

In describing conditions under an 80-hour week, an official wrote:

"* * * It was very clear that these schedules are neither to the best interests of the company nor the employee. There has been a very noticeable letdown in unit production per hour, wherever our schedudes have exceeded the 60-hour week. While employees working on these excessively long schedules have increased their weekly earnings to a very high level; they have become a dissatisfied group or employees. They now wish to retain their present earning levels but object to the long hours."

In seeking to solve the longer week situation, special problems arise.

For example: Shall employees work five days at longer hours and get a relatively long week-end or shall it be six days at shorter work days?

Prefer Eight-Hour Day

Of the companies covered in the Princeton survey, five times as many preferred the eight-hour day, six-day week over any other arrangement. This preference is reflected in the fact that more than half of the companies which have gone over 40 hours per week have schedules of 48 hours for six days or 56 for seven.

"From all statistics available," one employer reported, "it is felt that employees can work ten hours per day for a five-day week with no more fatigue or loss of production than would result for eight hours per day for a six-day week. Unquestionably the unions and employees in practically all cases prefer to work longer hours for five days and have Saturday and Sunday free. This gives them sufficient time to rest and is a far better recuperation period than Sunday only."

One company which employs a large percentage of women, commented:

"Six eight-hour days seem to be best. Some women, however, prefer five nine-hour days plus four hours on Saturday. This enables them to discharge certain home duties with which a six-day week would interfere.

Few companies, according to the report, have a good word to say for the employment of a worker on a seven-day a week basis, despite the fact that such a schedule has been in operation in many companies since Pearl Harbor.

"The reports of ill effects of the seven-day work week raise doubt as to the worthwhileness of such a schedule under any circumstances. Experience re-emphasizes the great importance of training additional personnel just as quickly as possible and of re-engineering jobs in order that skilled workers may be used to best advantage," the report of the survey states.

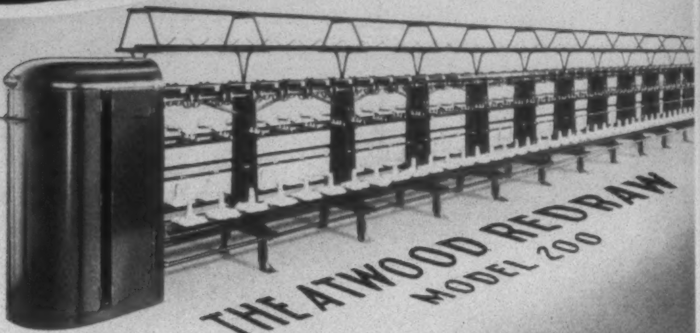
The Seven-Day Week

A typical reaction on the seven-day week was:

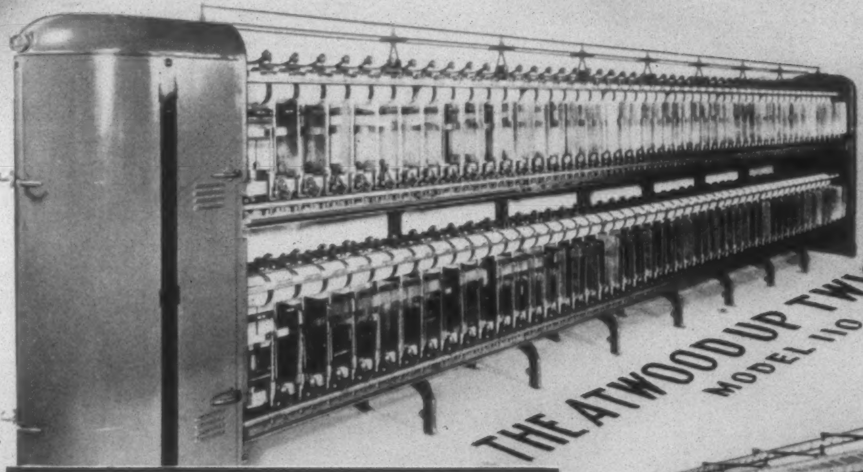
"Constant work of seven days increase fatigue, reduces productivity, increases absenteeism and possibilities of

(Continued on Page 54)

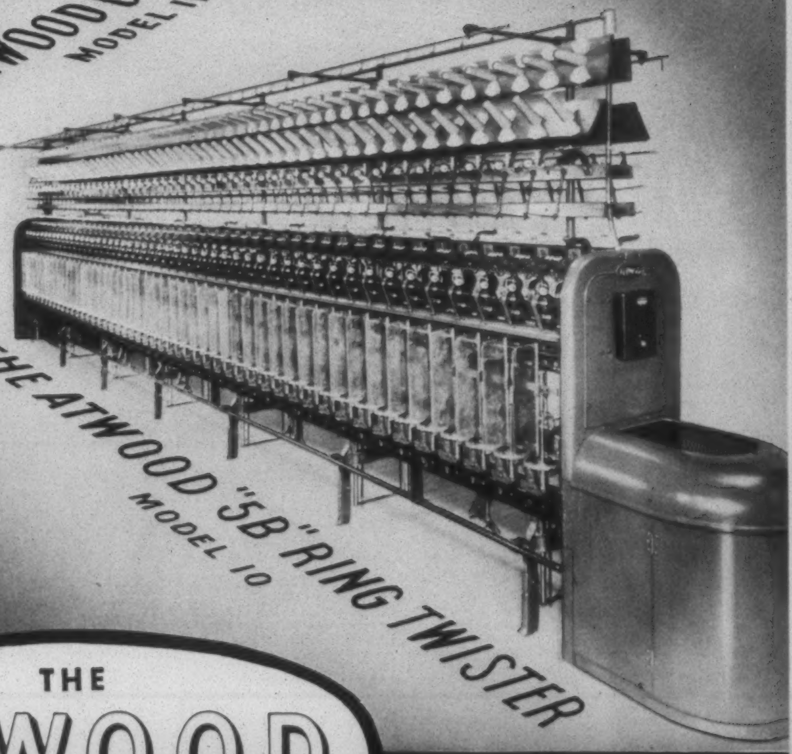
MODERN ATWOOD MACHINERY



THE ATWOOD REDRAW
MODEL 200



THE ATWOOD UP TWISTER
MODEL 110



THE ATWOOD "5B" RING TWISTER
MODEL 10

Because YOU are looking ahead, too!

Your present machines must be kept on the job — maybe working longer and harder than ever. Atwood parts and service back you to the limit.

Out and out war production comes first here at Atwood as elsewhere. But we want you to know that these — the finest machines Atwood has built in all our 90 years experience — are ready and able to meet your needs — *now*, if priorities permit — and immediately the emergency is over, in any case. Their ability to produce more and better yarn at lower cost has been thoroughly tested and proved in the field.

THE
ATWOOD
MACHINE COMPANY

STONINGTON CONN., U. S. A.

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SAO PAULO · MEXICO CITY · MELBOURNE · SYDNEY · BOMBAY · MADRAS

Reminiscences of YE OLDE COTTON FACTORY

By
I. K. EDWARDS
Part Three

A GREAT many of the persons now employed in the textile industry have little conception of the conditions existing in the industry from its beginning in the South until comparatively recent times. Like the automobile, radio, etc., they take modern improvements in the textile mill as a matter of course. In this third of a series of articles on conditions in the past Mr. Edwards brings out points that will be news to the younger workers, and will bring memories to the old timers. The story continues:

Water From Well Or Spring

The section hand kept the machines in proper condition and supervised the duties of all on his "section" of frames. In addition to the doffers and spinners he had a sweeper to keep the floor clean and carry drinking water from a well or spring, also an oiler who also kept the spindle bands on and a man to keep the "roving" laid on top of the frames so the spinner would be constantly supplied with stock from the card room with which to keep the frames running. Each section therefore had its own complete organization, and each individual had certain responsibilities and obligations. The number of sections in the spinning room was, of course, determined by the number of frames in the room, the yarn numbers, style of goods produced, etc., and tasks were assigned in proportion to the effort required, all these problems being under the supervision of the "overseer" who was head of the department or "room," also where the situation required, the "second hand" or assistant to the overseer.

In most cases the spooling and warping was under the direction of the overseer of spinning. Owing to the fact that the greater part of the spinning room personnel was in the 'teen age, and enjoyed a rather limited social and educational environment, long days of duties, even enduring hardships at times because of sickness, accidents, deaths from contagious disease and many other discouraging experiences, the fact that they have been able to win out against such odds is a glowing tribute to the fine type of manhood and womanhood which has resulted therefrom.

Neighborliness

The continual association of the mill operatives formed a bond of neighborliness that made the sick room the neighbor's burden all the way. Also in case of death in a family the neighborhood came in and took care of the entire situation, which was a very different procedure from that of today. The attitude of the mill officials toward their "help" was very much like that of a father rather than a "boss" for whenever and wherever there was distress or grief in his "village" the "Super" or President, or whatever the official title, he was ever ready to relieve such a situation. Also it was no uncommon custom for each family in the village to receive a turkey or a big ham at Christmas, along with numerous other items for the little folks.

Church and school activities occupied a very important place in the community.

The "chapel" which was built on the village property was used by all, of whatever denomination, and soon became a very strong influence for the religious development of the younger generation. It very often happened that a young boy or girl of the adolescent stage developed into a most admirable Sunday school teacher, or conductor of prayer meeting, or a song leader and eventually called to the ministry. Sometimes services in the chapel would be conducted by one of these mill boys in absence of the regular pastor.

The village school was built to meet the needs of the village and was fitted with two or more rooms.

Mills Locate Near Stream

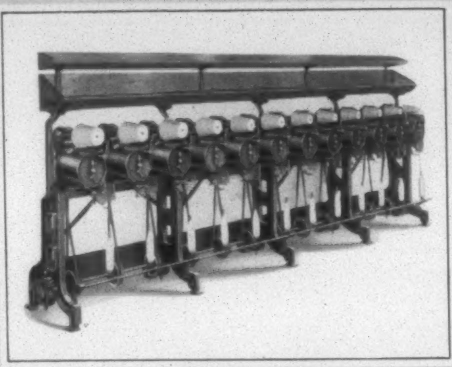
Being so wonderfully blessed with a bountiful supply of natural resources such as water power, fertile soil and many other advantages it was quite natural to choose a location near a sizable stream and at the same time in as close proximity as possible to the local shopping centers to build the new mill. The old "overshot" was replaced by the turbine water wheel and the steel flume instead of the wooden "trough." Also the old wooden cog wheel was discarded for the rope drive, thus a very decided improvement was introduced in power plant development.

Many fine examples of real engineering talent sprang up over the district, and some of the largest mills of today stand as evidence of the excellent judgment in building of dams, pitching of flumes and setting wheels, assuring the succeeding master mechanics of a thoroughly dependable pipe, 1½-inch and 2-inch pipe in groups or "coils" of 4 "drive." Then, too, plant lighting and heating, adoption of the electric incandescent lamp, using the small dynamo driven by a steam engine on a tight-and-loose pulley drive coupled to the main drive, and steam heating by means of 6-inch iron pipes running from the boiler to the main building thence branching out through the various departments or "rooms."

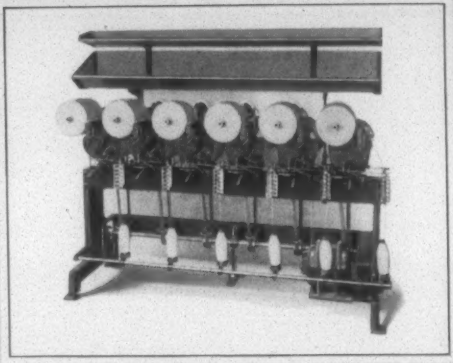
(*Continued on Page 44*)

Winders that can "take it"!

IDEAL FOR HEAVY DUTY REQUIREMENTS OF VICTORY PROGRAM



FOSTER MODEL 40

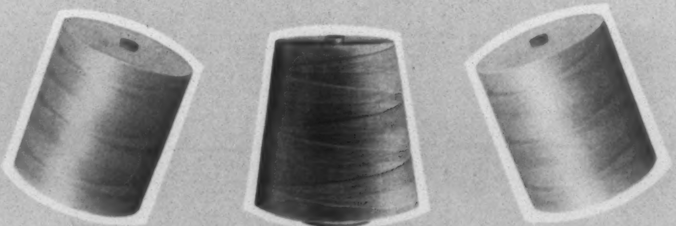


FOSTER MODEL 77

The Victory Program requires far greater poundages than ever before of coarse yarns and heavy plies. It is vitally important that mills handling these yarns be equipped with winders that can "take it".

Here are two such machines, tried and proved: the Model 40 and Model 77 precise winders for cones and tubes. They operate year in and year out with a minimum of mechanical repair and maintenance.

1. Precise wind or lay.
2. Ballbearing spindles and drive shaft standard on Model 77, optional on Model 40.
3. Spindles driven by individual quarter-turn belts.
4. Equipment for drawing either overend or unrolling.
5. Arbors for various types of cones and tubes furnished for both machines.
6. Traverses on Model 77 up to 8″, on Model 40 up to 6½″.
7. Multiple end winding of braider tubes on the Model 40.
8. The Model 77 winds a range of counts from 8's 3 ply to 8's 100 ply, the Model 40 from 30/2 to 8/40.



FOSTER MACHINE COMPANY

WESTFIELD, MASSACHUSETTS

SOUTHERN OFFICE: JOHNSTON BLDG., CHARLOTTE, N. C.

New and Used Textile Machinery Now Need A-9 or Higher Preference Rating to Buy

IN a letter to David Clark, editor of TEXTILE BULLETIN, J. E. MacDougall, district manager of the War Production Board Priorities Field Service, of Charlotte, N. C., offered the following information in response to a request concerning textile machinery's availability to the mills:

Subject: Limitation Order L-83

Form PD-3 and PD-3A, PD-1 and 1A, and P-19-h

Under General Limitation Order L-83 dated April 9, 1942, the War Production Board assumed control of the manufacture and distribution of many types of industrial machinery in an effort to stimulate conversion of machine tools and skilled labor to the output of war materials. All manufacturers and distributors are prohibited from delivering textile machinery and equipment unless they receive orders bearing an A-9 or higher preference rating, issued at any time on an original PD-1, PD-1A, or P-19-h Certificate or on a PD-3 or PD-3A Certificate countersigned before the 9th day of April, 1942.

Among the categories of industrial machinery is textile machinery and equipment. The term "textile machinery and equipment" includes but is not limited to machinery and mechanical equipment used in mills for carding, combing, spinning, throwing, winding, weaving, knitting, printing, bleaching, dyeing and otherwise processing or finishing cotton, wool, silk, flax, asbestos, hemp, jute, and other fibers and the products of these fibers; and further, any machinery and mechanical equipment for the production, processing, and finishing of artificial and synthetic textile fibers such as those produced from wood pulp, cotton linters, coal tar, and glass.

The order restricts the sale of any second-hand or reconditioned machinery.

No prohibition is placed on deliveries of less than one thousand dollars' worth of parts to repair or maintain a single piece of existing machinery or on deliveries of parts worth more than one thousand dollars in cases where there has been an actual breakdown or suspension of operation because of damage or destruction of machinery.

"On or before April 25, 1942, every Manufacturer of Critical Industrial Machinery shall file in triplicate with the War Production Board, plainly marked 'Ref: L-83,' a supplementary list of all orders for Critical Industrial Machinery now on his books (in excess of the amounts listed in List A), not reported under paragraph (b) (2), together with the name of the purchaser or lessee, the date of the order, the number of pieces of equipment or machinery, a description of the machinery, the sales or rental value of the machinery, the rating assigned, the preference rating certificate number, if any (or blanket preference rating order and serial number), the specified delivery date, the percentage of completion of the order, and the expected use to which the machinery will be put."

American Cotton Manufacturers Program On Serious Note

The convention of the American Cotton Manufacturers' Association, to be held in Atlanta May 1st and 2nd, will be on a more serious note than at any time in the past, according to W. M. McLaurine, secretary and treasurer.

"All Out for Victory" has been chosen as the theme for the meeting and all of the addresses will point to this theme as to "how we can be sure to make our contribution," said Mr. McLaurine. The first event of the convention will be the regular pre-convention dinner meeting of the Board of Government at 7 o'clock, Thursday evening, April 30th, in the private dining room of the Atlanta Biltmore Hotel. Work of the last year will be discussed and plans for the new year will be considered.

The first general session will be in the hotel's assembly hall at 10 o'clock, May 1st. Speakers will be Oscar Johnston, president of the National Cotton Council; John F. Chapman, foreign editor of *Business Week,* and W. N. Banks, president of the American Cotton Manufacturers' Association.

The organization has not planned to have a golf tournament or a skeet shoot this year and, instead, will give the afternoon to a serious session on promotion and research, the speeches to be made by representatives of the Cotton-Textile Institute and the National Cotton Council. Exhibits of the work in promotion and research that has been done will be shown in the hotel corridors and in the assembly hall.

There will be one short serious speech at the annual banquet on Friday evening, May 1st, by Dr. Pierce Harris, pastor of the First Methodist Church of Atlanta. After the banquet there will be dancing.

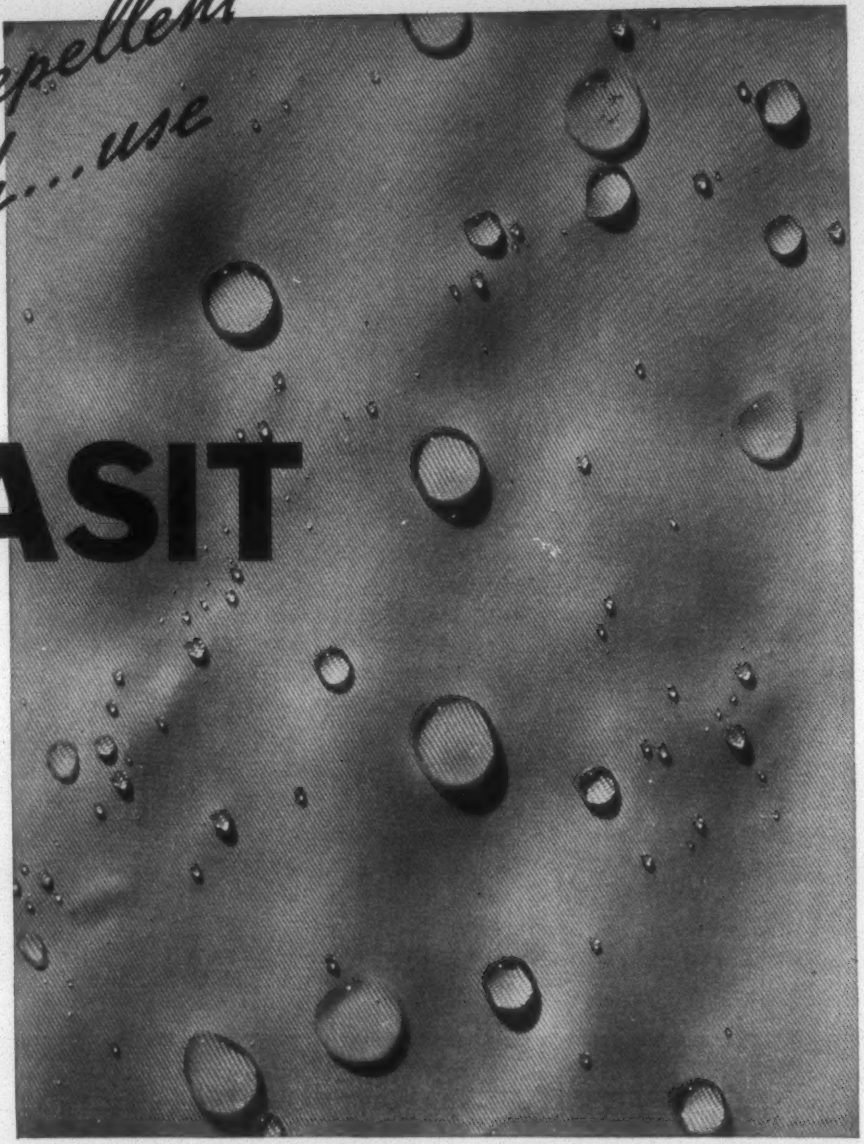
The final session of the Association will be on Saturday morning, May 2nd, at 10 o'clock. Speakers will be O. Max Gardner, of Washington, former Governor of North Carolina; Dr. Claudius T. Murchison, president of the Cotton-Textile Institute; W. D. Anderson, of Macon, Ga., president of the Bibb Mfg. Co., and Mr. McLaurine.

Mr. Gardner will give the manufacturers a picture of the Washington scene especially from the standpoint of the taxes the mill men will have to pay. The textile industry in the economic picture will be discussed by Dr. Murchison and Mr. Anderson will tell ways in which he tries to meet the problems of a mill president. Mr. McLaurine will discuss the public relations program he has been working on for the last year. He will tell of what has been done and the plans for the new year. His report as secretary will be submitted in printed form along with that of Mr. Banks.

Business of the Association will be handled at the end of the program.

Mr. McLaurine said that special entertainment will be arranged for ladies who attend and that he is expecting a large crowd at the convention.

"Everything is being done to make this convention constructive and social," he said. "In times such as these, there must be no waste motion and unnecessary waste motion or unnecessary meetings. It is the thought of those preparing the program that the profit for those attending will exceed any loss they may imagine."



for a water repellent finish...use

RAMASIT

GDC

RAMASIT is a one-bath water repellent finish which, because of its low cost and ease of application, can be used on all grades of merchandise. It forms stable emulsions which are easily applied to cottons, rayons, silks and woolens on the quetch, padder, jig or beck. Ramasit imparts a superior water repellent finish. It leaves the fabric air porous and gives a soft and full handle. Information and samples will be sent at your request.

GENERAL DYESTUFF CORPORATION

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Boston, Mass. Charlotte, N. C. Providence, R. I. Chicago, Ill. Philadelphia, Pa. San Francisco, Calif.

SERVING THEIR COUNTRY

HONOR Roll of former textile mill employees or sons of textile mill employees who are now in uniform in the army, navy, marines or air forces. We will welcome similar lists from other mills.

Bibb Mfg. Co.

No. 1 Mill

Andrews, Ira Joe
Butts, John
Byrd, Willie Green
Campbell, Geo. A.
Card, Herman
Card, Willie
Cary, Gordon
Chafin, Lloyd Alvie
Chapman, Hubert Eugene
Cox, Lee Roy
Curtis, Elmer
Davis, Clifford
Davis, Jimmie Lee
Dix, Tony R.
Durham, Willie James
Dyche, Franklin
Ferguson, Mathew
Floyd, John Alvin
Foster, Wade H., Jr.
Fuller, Ned, Jr.
Griffin, Isaac Marcus
Griffin, Marshall F.
Harrison, Charles E.
Hartley, Jesse B., Jr.
Hearn, Richard L.
Heath, Alvin
Hollis, Victor R., Jr.
Johnson, James W.
Johnson, Emanuel
Jones, Robert J.
King, Jesse T.
Kitchens, Harold Lamar
Lavender, Alvin
Martin, G. Candler
McCommon, John Powers
McPeters, Alfred
Miller, Ernest
Miller, Ned
Nelms, Henry
Newberry, Robert H.
Paul, William
Payne, James Lamar
Peck, Elgin
Penland, Joseph S.
Perry, Emory
Pitts, Tillman
Poole, Jesse V.
Price, Gilbert
Rachels, Dock K.
Reynolds, William
Roberts, Kenneth Earl
Rogers, Jesse L.
Rowland, Malcolm H.
Sanders, Gilbert T.
Smith, John Henry
Smith, Elmer
Spencer, Joshua
Stephens, Roy Wilder
Stephens, Wendell Fred
Stevens, Carl Walter
Towson, Marvin Wade
Walker, Thomas Frank
Warrick, Dewey Alfred
Williams, Willie
Yarbrough, Lonnie S.

Payne Mill

Allen, Henry Charles
Bailey, Donald O.
Caldwell, Cephus
Daughtry, Thomas Walter
Entrekin, Louie G.
Giddens, Daniel B.
Giddens, Earl P.
Giddens, Wallace
Jones, Cleo Marvin
McCardell, Fowler A.
McDongal, Lamar
Minton, Willie A.
Pearman, John B.
Perkins, Raymond
Phelps, Frank
Scarborough, Charlie
Scarborough, William
Sharpe, James P.
Stevens, Claxton Rembert
Waldrop, Robert L.
Walker, Harry
Watson, Woodrow Wilson
Wilson, Ralph
Windham, Victor I.
Woodard, Jesse W.

No. 2 Mill

Adams, Guy
Ball, Juston P.
Barnes, George
Barton, Vernon
Batchelor, Cordy
Belflower, Devaughn
Brantley, Alfred B.
Brown, John
Call, Oscar
Carroll, Floyd W.
Childree, Lavansha A.
Conner, Arthur
Crawford, Walter
Doolittle, Thomas J.
Driggers, Kelley
Epps, Wm. H.
Evans, Francis M.
Evans, George
Goins, Wade
Gordon, Luther Q.
Hall, David L.
Harris, Oscar, Jr.
Heath, Joe
Henderson, Clarence
Howard, Solomon
Hubbard, Richard H.
Johnson, Woodrow
Knight, Thomas F.
Martin, Samuel
McAllister, Robt. L.
McMillan, Lewis, Jr.
Mitchell, Thos. J.
Nobles, G. Jackson
Oliver, Frank
Pannell, Ernest L.
Parker, George W.
Payton, George W.
Pittman, James O.
Powell, Wm. D.
Pritchett, Jonathan
Ramage, James L.
Scott, Heren
Taylor, Dolphus C.
Thomas, James
Tucker, Louis
Ward, Roy N.
Warren, Harvey M.
Wright, David

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VICTOR
MILL STARCH
The Weaver's Friend

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That forty years of Experience enables us to render SERVICE to the Textile Industry that cannot be duplicated in the

Repairing, Overhauling, Dismantling and Erecting of Cotton Mill Machinery

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Southern Spindle & Flyer Co.
Incorporated
Charlotte, N. C.

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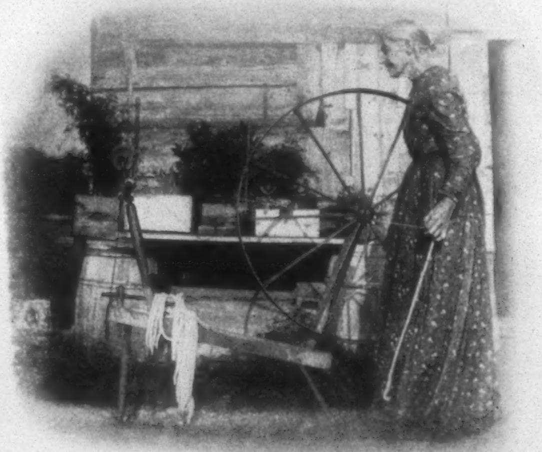
W. H. MONTY, - - - - - Pres. and Treas.



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SANFORIZING BLANKETS SLASHER JACKETS
ENDLESS REVOLVING CLEARERS

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FOR EVERY PHASE OF TEXTILE PROCESSING

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PRODUCTS

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★ WARP DRESSINGS
★ RAYON OILS
★ RAYON SIZINGS
★ DEGUMMING OILS
★ BLEACHING OILS
★ KIER OILS
★ FINISHING OILS
★ WOOL OILS
★ RESIN FINISHES
★ SOLUBLE WAXES
★ DYE ASSISTANTS
★ DELUSTRANTS
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★ SYNTHETIC DETERGENTS
★ SPLASHPROOF COMPOUNDS
★ WETTING-OUT AGENTS
★ WEIGHTING AGENTS

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MANUFACTURING CHEMISTS
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THE HART PRODUCTS COMPANY of CANADA, Ltd. • GUELPH, ONTARIO

Could Be

The following sentence is reprinted verbatim from a textile paper market report:

Trading was SLICK in the Worth Street market yesterday.—(Italics and caps are ours.)

We are wondering if this was a typographical error or a confession.

Changes in Sales Staff of Stodghill & Co.

Stodghill & Co. announces the following personnel changes:

H. O. Irwin, formerly with the Eagle and Phenix Mills, Columbus, Ga., is now with the sales and service staff in Georgia, Alabama, Tennessee and northern Mississippi. Widely known throughout this area as a mill man of long and successful experience, Mr. Irwin joins forces with W. C. Gibson and J. W. Simmons, Jr., who are also active in this territory.

C. A. (Curt) Herndon, who, before coming to this company four years ago, was employed by the Echota Cotton Mills of Calhoun, Ga., is now with the South Carolina-North Carolina territory.

John Bothamley, who has traveled the textile circuit from Boston to New Orleans for 30 years, is now with the Textile Finishings Department and contacts dyeing and finishing plants throughout the Southeast.

School Busses May Carry Danville Textile Workers

Danville, Va.—Arrangements have been practically completed for the use of county school busses this summer to bring more than 5,000 textile workers to and from the mills. The tire situation is rapidly complicating the whole textile transportation problem, but the operators of county school busses have shown eagerness to step into the breach and to make some money during the idle months and, at the same time, help the industrial situation.

More than a dozen bus drivers are prepared to engage in this service just as soon as schools end May 1st. Some may even move into action before.

WPB Said To Have Enough Data To Plan Textile Allocation

The WPB now has sufficient information to handle a program of allocations for war textiles, states Scheuer & Co., textile consultants. Success of further Government operations and the significance to the civilian trade lies "in the interpretation and use of all this statistical information."

Scheuer & Co. continues:

"The WPB is now in possession of complete and detailed information as to the total productive textile resources of the United States: What our machinery consists of, how it has been operated in individual establishments and the industry as a whole, what qualities and quantities it has produced, its commitments for future deliveries, and how much of these have been absorbed by, or are on order for, Government agencies.

"Similar statistics will be gathered quarterly, thus ensuring that this agency will know exactly how the industry is functioning. This is a signal accomplishment, the necessity for which we have long and repeatedly urged.

"Overall planning and more effective use of our vast facilities are thus made possible. The WPB is now in a position to appraise the various demands, actual and potential, upon our textile capacity and to rate them in conformity with the country's best interests. Accordingly, the use of and output of the machinery of the country will be guided by this agency, and the flow of goods into civilian markets will henceforth be determined largely by them. The most difficult task lies ahead, i.e., the interpretation and use of all this statistical information.

"Much technical textile knowledge will be required, a keen sensibility to fabric construction and manipulation, and a balanced judgment which encompasses all aspects of the military, Lend-Lease, and civilian requirements. A tremendous opportunity and a heavy responsibility rest upon those who will work out this delicate conversion program. Their actions are certain to cut across many individual interests and preferences.

"It is to be hoped that they will avoid the mistakes which have all too frequently plagued the 'planners,' that is, their ability to see the first step and failure to anticipate the second and third. The utmost in co-operation from all textile organizations is the least they are entitled to expect in this undertaking."

OBITUARY

T. CICERO ANDREWS

Burlington, N. C.—T. Cicero Andrews, 61, for many years foreman of the weaving room of E. M. Holt Plaid Mills, with which he was associated 37 years, until his retirement about 15 months ago, died at his home here.

J. CLARK STEWART

Greenville, S. C.—J. Clark Stewart, 52, former Pelham Mills executive, was shot and cut to death in the basement of his home here recently and Coroner W. H. Garrett pronounced it a suicide.

The coroner said Mr. Stewart's throat was cut with a razor blade and that he was shot in the right temple with a .22 calibre rifle. Death was apparently almost instantaneous.

Coroner Garrett said he was informed Mr. Stewart had been in declining health for some time.

Prior to the closing of Pelham Mills, Mr. Stewart was connected with the textile concern as secretary-treasurer.

CHRIS SUBER

Anderson, S. C.—Chris Suber, well known retired mill executive, died March 30th at his home on Roberts street. Mr. Suber suffered a stroke of paralysis a few days before and his condition since that time had been precarious.

Mr. Suber was retired last January 1st by the Gossett Mills which he had served many years as secretary and assistant treasurer. His health for the past two years forced his retirement from the employ of the large textile chain.

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32,145 Firms With Over 17,700,000 Employees Have Installed the . . .

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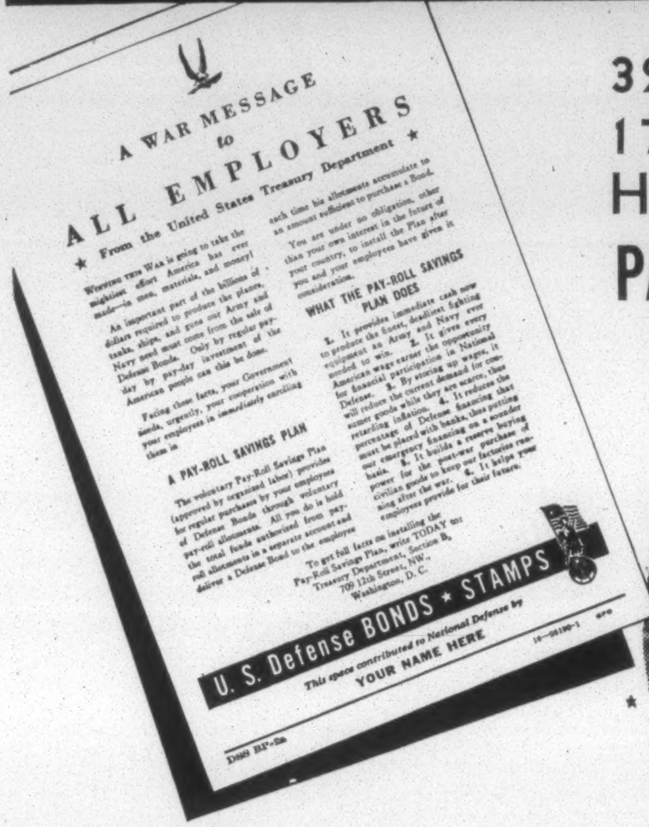

A WAR MESSAGE
to
ALL EMPLOYERS
★ From the United States Treasury Department ★

Winning this War is going to take the mightiest effort America has ever made—in men, materials, and money!

An important part of the billions of dollars required to produce the planes, tanks, ships, and guns our Army and Navy need must come from the sale of Defense Bonds. Only by regular pay-day by pay-day investment of the American people can this be done.

Facing these facts, your Government needs, urgently, your cooperation with your employees in *immediately* enrolling them in

A PAY-ROLL SAVINGS PLAN

The voluntary Pay-Roll Savings Plan (approved by organized labor) provides for regular purchases by your employees of Defense Bonds through voluntary pay-roll allotments. All you do is hold the total funds authorized from pay-roll allotments in a separate account and deliver a Defense Bond to the employee each time his allotments accumulate to an amount sufficient to purchase a Bond.

You are under no obligation, other than your own interest in the future of your country, to install the Plan after you and your employees have given it consideration.

WHAT THE PAY-ROLL SAVINGS PLAN DOES

1. It provides immediate cash now to produce the finest, deadliest fighting equipment an Army and Navy ever needed to win. 2. It gives every American wage earner the opportunity for financial participation in National Defense. 3. By storing up wages, it will reduce the current demand for consumer goods while they are scarce, thus retarding inflation. 4. It reduces that percentage of Defense financing that must be placed with banks, thus putting our emergency financing on a sounder basis. 5. It builds a reserve buying power for the post-war purchase of civilian goods to keep our factories running after the war. 6. It helps your employees provide for their future.

To get full facts on installing the
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709 12th Street, NW.,
Washington, D. C.

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NUMBER OF EMPLOYEES . . . .

MAKE EVERY PAY-DAY . . . BOND DAY!

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(This space donated by TEXTILE BULLETIN)

GPO 16—26944-1 Form No. DSS-280

Mill News

Griffin, Ga.—Rupert & Co., architects and engineers, are preparing plans for an addition to the Highland Mills here, manufacturers of velveteens and corduroys.

Durham, N. C.—The North Carolina Division of Purchase and Contract has awarded a contract to the Durham Hosiery Mills, of this place, for 60,000 pairs of wool socks.

Spartanburg, S. C.—The machinery and equipment of the Crescent Mfg. Co., manufacturers of men's and boys' hose and golf socks, has been sold to Morris Speizman, machinery dealer of Charlotte, N. C. Included in the purchase were approximately 300 knitting machines and all auxiliary equipment.

Hillsville, Va.—Jack Kahn, of New York, has been elected president of the Carroll Silk Hosiery Mills, Inc., of this city. Mr. Kahn represents the New York interests which purchased control in these mills recently from Thomas Wallner. L. E. Frye was elected vice-president; Stephen Lewis, of New York, secretary; George Murphy, of New York, treasurer, and B. P. Goad, of Hillsville, assistant treasurer.

Rock Hill, S. C.—The management has announced that the engraving department of the Rock Hill Printing & Finishing Co. has been closed for the duration of the war. It was stated that the approximately 25 men and women in the engraving department will be absorbed in other departments of the plant or secure positions elsewhere.

Attributed to the war emergency the plant is unable to obtain as much copper for engraving as needed and is using the same designs again in many instances. Also because a number of textile plants are producing defense goods it is becoming difficult for the bleachery to obtain goods. Then, too, there are fewer designs. In the future the engraving will be done by outside shops.

Griffin, Ga.—Griffin is to have its first plant exclusively working on orders for war materials. It is to be a shell manufacturing plant and the initial order calls for $450,000 worth of 40-mm. shells.

Orders have been received here to convert the American Thowing Mill plant into the shell manufacturing plant. The Throwing Mill, which processed silk for hosiery mills, has been idle since silk became impossible to secure.

The new shell plant will employ from 150 to 200 persons—both men and women—and will run on a seven-day basis, 24 hours every day.

Robert Shapard, Jr., president of the Throwing Mills, who is also president of the new shell plant, stated that actual work would begin by the first of September.

Rock Hill, S. C.—Samarkand Rugs, Inc., manufacturers of cotton rugs, is in the process of converting its facilities to war work, states Emil G. Baccash, secretary of the company.

Recently the company bought a number of Draper looms, which are now being installed and will be ready for operations soon, says Mr. Baccash. In addition to having the new machinery work on Government orders, some contracts on which are now pending, the present equipment will be gradually converted for similar production, he says.

Greer, S. C.—Franklin Mills, which employs 200 persons and manufactures gauze for surgical dressings, has been purchased by Victory Textiles, which has already assumed operation of the plant.

R. C. McCall, president of Victory Textiles and also president of Conveniences, Inc., of Greenville, manufacturers of surgical dressings, announced there was no change contemplated in the local management or the personnel at the former Franklin Mill.

Mr. McCall is president and treasurer of Victory Textiles, J. W. Norwood, Jr., is vice-president and W. E. Thompson, secretary. The board of directors is composed of the officers and W. W. Pate and J. J. Kaufman, Jr. The new firm has a capital stock of $40,000 and officials pointed out the financial structure of the firm would be expanded later.

Lexington, N. C.—Erlanger Cotton Mills, by reason of incorporation of its property, which includes a village of about 1,500, into the City of Lexington the first of this year, will receive reduction in property valuations amounting to approximately $40,000, according to action taken by the county commissioners, sitting as a board of equalization and review. The company has asked for a larger sum.

Exempted from the company acreage, which had been taxed as a whole as home sites and industrial tract, is 23.7 acres that are now city streets. Home site acreage is cut from $500 to $400 per acre and industrial site from $700 to $500 per acre. The dairy farm and a large field used for recreational purposes are also given lower rating.

It was explained on behalf of the board that the acreage reductions are made because the former figures reflected the values of water, sewer and other utility lines now transferred to the city and not subject to taxation.

WENTWORTH

Double Duty Travelers

Reg. U. S. P. O.

Hicks, American, Wilson, U. S. Standard

Last Longer, Make Stronger Yarn, Run Clear, preserve the SPINNING RING. The greatest improvement entering the spinning room since the advent of the HIGH SPEED SPINDLE.

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A New Chemical Treatment

Manufactured only by the

National Ring Traveler Co.

Pawtucket, R. I.

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Since 1866 our policy of Fair Service to All has been the bulwark of our business. It has withstood the test of two major wars and several depressions. Today our customers have confidence in our ability to protect their interests . . especially through the present emergency. They have confidence in the high quality of our textile starches . . corn, potato, wheat . . which reflect the craftsman's art in skillfully converting the best materials the world affords. This customer confidence is one of our most valuable assets. We shall do all in our power to preserve and strengthen it.

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Working
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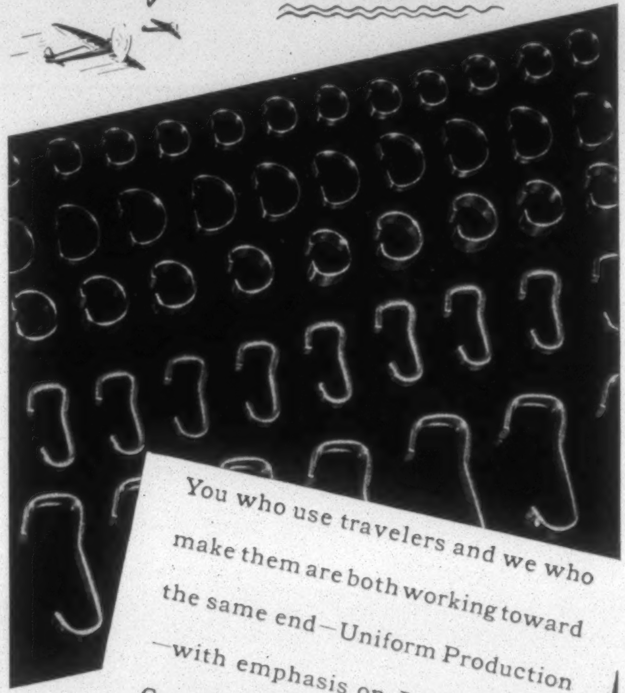
Uniform Production



You who use travelers and we who make them are both working toward the same end—Uniform Production—with emphasis on *Production*. Carter is keenly aware of the problems of their customers these days in general and regarding *travelers* in particular. . . That is why *every* traveler we make is a precision job in itself. A *traveler* made the Carter way, can be produced just so fast, but—we can and have increased our productive capacity.

CARTER TRAVELER COMPANY

DIVISION OF

A. B. CARTER, INC.

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Personal News

J. T. Hunt is now night overseer of Carter Mills, Lincolnton, N. C.

Frank Gurley, formerly overseer of carding, is now night superintendent at Carter Mills, Lincolnton, N. C.

J. P. Holder, formerly with the Callaway Mills, LaGrange, Ga., is now overseer of carding at the Mississippi Cottons, Inc., Meridian, Miss.

J. E. Gwynn, formerly of Granite Falls, N. C., is now second shift second hand in spinning at the Edna Mills Corp., Reidsville, N. C.

Hoyt Morton has been promoted from night overseer to general overseer of carding at Carter Mills, Lincolnton, N. C.

J. W. Engle, formerly superintendent of Travora Mfg. Co., Plant No. 2, Haw River, N. C., is now superintendent of Virginia Mills, Inc., Swepsonville, N. C.

J. Frank Wharton has been promoted from night overseer to general overseer of spinning, winding and twisting at Virginia Mills, Inc., Swepsonville, N. C.

C. L. Williams has been promoted from section man to foreman of first shift spinning, winding and twisting at Virginia Mills, Inc., Swepsonville, N. C.

Allen Sibley, treasurer of the Judson Mills, Greenville, S. C., has been elected a director of the Rotary Club of Greenville.

W. D. Anderson, president of the Gastonia Mill Supply Co., has been elected president of the Rotary Club of Gastonia, N. C.

Benjamin C. Russell, president of the Russell Mfg. Co., has been re-elected president of the Alexander City, Ala., Chamber of Commerce.

B. C. Hunnicutt, formerly with Brookside Mills, Knoxville, Tenn., has accepted a position as assistant superintendent of the Montgomery (Ala.) Cotton Mills.

Walter Gosnell, Jr., has resigned as overseer of carding at Laurens (S. C.) Cotton Mills to become assistant superintendent of the Beaumont Mfg. Co., Spartanburg, S. C.

Ralph H. Hodnett, who for the past four and a half years has been manager of the converting department of the West Point Mfg. Co., West Point, Ga., has been transferred to the general offices where he joins the staff of the cost department.

Harry M. Arthur, president of the Excel Hosiery Mill, Union, S. C., is now a Lt. Col. of the 118th Infantry. He acquired military training at The Citadel, Charleston, S. C.

N. A. Johnston has been transferred to the converting department of the West Point (Ga.) Mfg. Co. as manager. He has been with the cotton department for 12 years.

Geo. C. Cramer, treasurer of Cramerton (N. C.) Mills, is now serving in the U. S. Army and has been promoted to the rank of Captain in the War Plans Division of the Air Corps.

Chas. A. Cannon, president of the Cannon Mills Co., Kannapolis, N. C., has been appointed by Gov. J. M. Broughton as a member of the North Carolina Highway Commission.

Mrs. W. H. Gibson, Jr., wife of the superintendent of the Martha Mills, Thomaston, Ga., has been confined to a hospital by reason of breaking her hip and arm. She slipped on a rug in the hall of her home.

COMING TEXTILE EVENTS

APRIL 25

South Carolina Division, Southern Textile Association, Parker High School, Greenville, S. C., 9:45 A. M.

Alabama Textile Operating Executives, Auburn, Ala., 9 A. M.

APRIL 30

Fifteenth Annual Style Show, N. C. State College Textile School, Raleigh, N. C.

MAY 1-2

American Cotton Manufacturers' Association, Annual Convention, Atlanta Biltmore Hotel, Atlanta, Ga.

MAY 9

Eastern Carolina Division, Southern Textile Association, N. C. State College Textile School, Raleigh, N. C., 9:45 A. M.

MAY 21-23

Cotton Manufacturers' Association of Georgia, Annual Spring Meeting, Cloister Hotel, Sea Island, Ga.

JUNE 6

American Association of Textile Chemists and Colorists, Southeastern Section, Meeting, Atlanta, Ga.

JUNE 6-7

Fourth Annual Textile Golf Tournament, Carolina Golf Course, Charlotte, N. C.

JUNE 12-13

Southern Textile Association, Annual Convention, Charlotte, N. C., Charlotte Hotel.

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STARCHES

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★ UNIFORMITY
★ SERVICE

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CLINTON, IOWA

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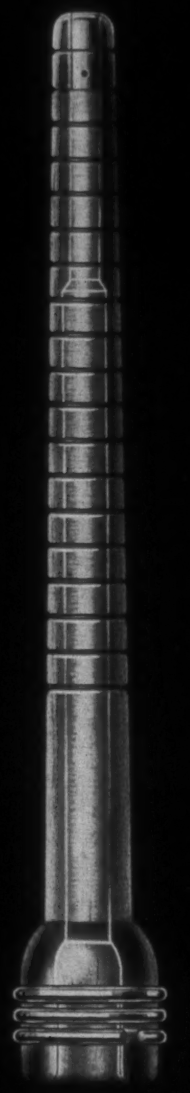

PRECISION BOBBINS

This x-ray view shows a most important detail in Precision Bobbins. From butt to tip the spindle hole must be straight, round and the various diameters concentric. PRECISION boring and testing of every Precision Bobbin on customer's own spindle eliminates bobbin wobble.

Precision Bobbins Are Made By

NEW ENGLAND
BOBBIN & SHUTTLE CO.
George M. Hambleton, Gen. Mgr.
NASHUA, NEW HAMPSHIRE

John Tillett Suffers Heart Attack

John Tillett, treasurer of the Leaksville Woolen Mills, Homestead, N. C., and Spray, N. C., is confined to his home at Charlotte, N. C., following a heart attack.

Mr. Tillett is making progress but will probably be confined for two months.

E. A. Terrell Is Re-appointed to N. A. M. Committee

Re-appointment of E. A. Terrell, of Charlotte, president of the Terrell Machine Co., to membership on the patents and research committee of the National Association of Manufacturers was announced in a communication received from the association's New York headquarters.

Robert L. Lund, St. Louis industrialist, was re-appointed chairman of this committee.

Supervisory Changes At Bibb Mills

Several changes in the supervisory personnel at the Bibb Mfg. Co. have been announced recently.

G. D. Cross is now superintendent of the No. 2 Mill and E. J. Hertwig is superintendent of Payne Mill, both at Macon, Ga.

B. D. Cain is now superintendent of the Osprey Mill, at Porterdale, Ga.

Grady Morgan has been promoted to assistant superintendent of the No. 2 Mill at Macon.

B. B. Snow has been released from his duties as superintendent of the No. 2 Mill so that he can spend all his time as general superintendent of all Macon mills of the company.

P. E. Findlay, Jr., will devote all his time to the general superintendency of the mills at Porterdale.

At Columbus, Ga., John S. Turner has been made general superintendent of the Columbus Mill, with C. E. Dorn superintendent of carding and spinning and R. M. Stephens superintendent of finishing.

H. L. Marlow in Hospital

H. L. Marlow, sales engineer for the Texas Co., with office at Charlotte, N. C., is now seriously ill at the Presbyterian Hospital in Charlotte following a gall bladder operation. As we go to press he is reported to be improving.

J. H. Matthews and O. H. Cilley New Raybestos-Manhattan Directors

J. M. Matthews and O. H. Cilley were elected to the board of directors of Raybestos-Manhattan, Inc., at a recent meeting of stockholders in New York.

Mr. Matthews is assistant general manager of the Manhattan Rubber Mfg. Division, Passaic, N. J., and Mr. Cilley is assistant general manager of the United States Asbestos Division, Manheim, Pa., both prominent divisions of Raybestos-Manhattan, Inc.

Lieut. Geo. L. Dover Killed

Lieut. Geo. L. Dover, of Shelby, N. C., half brother of J. R. Dover, Jr., president of the Dover, Ester and Ora Mills, was killed on April 3rd in the crash of a training plane.

Electrician Killed At Mill

Easley, S. C.—Clarence Lee Baker, 35, well known resident of Easley and electrician at Glenwood Mill, was accidentally killed while working on a transformer near the boiler room of the mill April 14th. Details were lacking.

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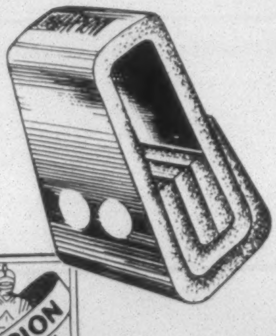
– by name – in fact



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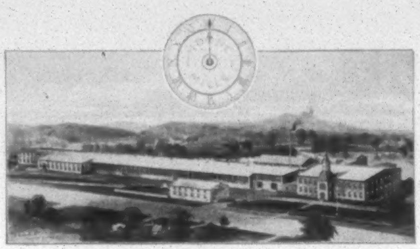

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Long experience in manufacturing Slasher Cloths and continuous experimenting have enabled us to produce several types of Slasher Cloth, each especially constructed to give best results on the particular kind of yarn to be sized.

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We are the oldest manufacturers of Slasher Cloth in America. Our experience enables us to build a Slasher Cloth that will meet your most particular demand. Use NOONE'S SLASHER CLOTHS and be convinced.

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Ashworth surveys operate on the theory that "an ounce of prevention is worth a pound of cure." We can't stop your card clothing from wearing out, but we can detect signs of wear before it gets serious. You can then plan repairs so they do not materially interfere with production and so that the cost will be distributed over a long period.

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TEXTILE BULLETIN

Member of
Audit Bureau of Circulations and Associated Business Papers, Inc.

Published Semi-Monthly By

CLARK PUBLISHING COMPANY

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Eastern Address: P. O. Box 133, Providence, R. I.

David Clark	President and Managing Editor
Junius M. Smith	Vice-President and Business Manager
Ellis Royal	Associate Editor

SUBSCRIPTION

One year payable in advance	$1.50
Other Countries in Postal Union	3.00
Single Copies	.10

Contributions on subjects pertaining to cotton, its manufacture and distribution, are requested. Contributed articles do not necessarily reflect the opinion of the publishers. Items pertaining to new mills, extensions, etc., are solicited.

Elimination of Bronze Travelers

Unless orders, which have been issued at Washington, are changed and traveler manufacturers are allowed to buy bronze wire, there will soon be no bronze travelers.

Long experience has shown that twisters cannot be operated efficiently with steel travelers.

Very light steel travelers such as are used in spinning are entirely practical, but heavy steel travelers are not suitable for the manufacture of plied yarns on twisters.

Steel travelers running on steel rings generate great heat and, with steel travelers, twister rings wear very rapidly and soon have to be discarded. Steel travelers collect grease and when the grease gets on the yarns they are not suitable for many army fabric purposes.

If the WPB refuses to permit manufacturers of travelers to obtain bronze wire it will seriously affect the production of sewing thread and the plied yarns which are needed for ducks and other army fabrics.

There is already a shortage of twisters and, as steel travelers cannot be used at high speed, their use will slow down the production of plied yarns.

Mills manufacturing sewing thread or plied yarn should take this matter seriously and give aid to traveler manufacturers, in their efforts to obtain bronze wire for twister travelers.

Old bronze travelers should be saved by mills but they are useless unless the phosphor bronze travelers are kept separate from the American bronze travelers and unless the oil and grease is removed by boiling with caustic or some removal element. The need for copper and bronze will justify the trouble.

Annual Textile Golf Tournament

The Fourth Annual Textile Golf Tournament will be held at the Carolina Golf Club, Charlotte, N. C., on June 6th and 7th.

Qualifying rounds may be played Saturday, May 30th, or on any of the following six days, but no qualifying round may start later than 3 P. M. Friday, June 5th.

Players in both the textile manufacturers and salesmen's divisions will be divided into flights of eight.

First round matches will be played during the morning of Saturday, June 6th, second round matches that afternoon and the finals on Sunday, June 7th.

The tournament fee of $2 covers all charges except caddy fees. There will be prizes for the winner and runner-up in every flight. The prize for the winner will be of silver. There will also be a special cup for the lowest score made by a mill team of four players.

The 1941 Textile Golf Tournament drew a field of 208 players. Carl Jordan, of the Rock Hill Printing & Finishing Co., won the championship division of textile manufacturers, while Erwin Laxton, of Charlotte, won the championship division of salesmen.

The team prize was won by the team of the National Weaving Co., of Belmont, N. C., while the Hudson Silk Hosiery Co., of Charlotte, which entered six teams, won second place with their team No. 1.

His Idea of a Great Man

When Philip Murray, president of the CIO, delivered an address at Charlotte, N. C., on March 29th, President Frank Graham, of the University of North Carolina, introduced him with the statement:

> Mr. Murray is one of the great men of America. No man is doing more towards winning the war for his country.

Possibly President Graham never heard of the sit-down strikes staged in munition plants by the CIO under the direction of Mr. Murray or the CIO rules which even now slow down production of war materials.

Possibly he never heard of the beatings which CIO workers gave men in Detroit and other towns, when they insisted upon working without paying tribute to the Murray organization.

He who denies other citizens the right to work,

Welcome to Atlanta!

A. C. M. A. MEMBERS - - - - and

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for the many orders you have placed with us for—

THE SUPERIOR CLEANER

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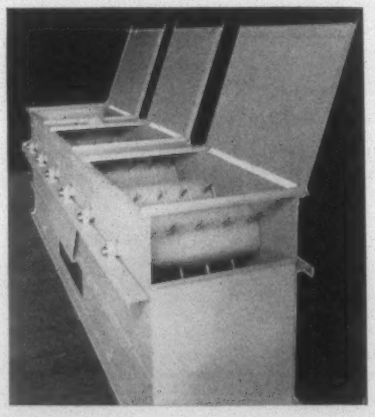
For Long Staple Cotton and Rayon

Opens, Cleans and Conveys Long Staple Cotton, Upland Cotton and Rayon without Rolling, Curling, Nepping, Stringing or Staple Breakage. Takes out Motes, Sand, Leaf, etc., also Removes Metal, Glass, Rocks, Seed and Other Hard Materials heavier than the Fibre.

This ultra-modern machine is built to operate as a complete independent unit following Bale Openers and Blending Hoppers or to supplement Centrif-Air Cleaners, Vertical Openers, Buckley Beaters, Lattice Openers, Platt Openers, Gyrators, Downstroke Cleaners, etc.

The certain results are: Cleaner and Smoother Picker Laps—Cleaner Card Sliver—Better Spinning and Better Weaving.

THE SUPERIOR CLEANER is also far superior to any device now used in the industry for Conveying Cotton and Feeding Pickers.



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This machine must accomplish all we claim for it and prove entirely pleasing, or you can return it for full credit. Write today for complete data on this answer to your opening, cleaning and conveying problems.

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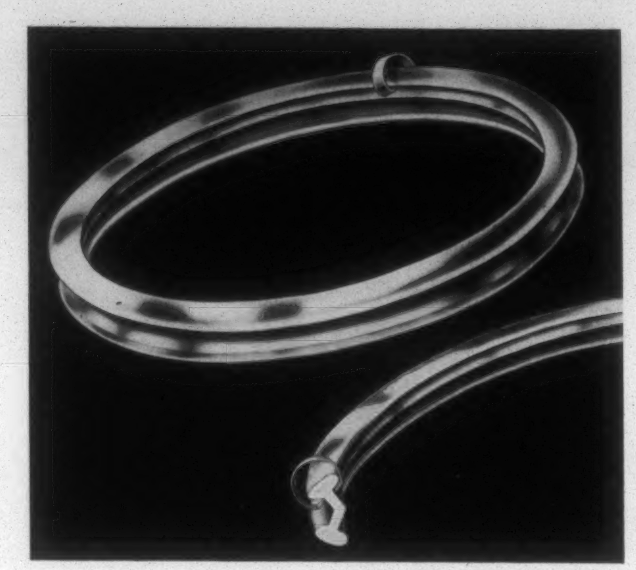

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Greater Efficiency Per Spindle is the effective answer furnished by Ragan Rings to your twofold problem of increasing production and, at the same time, decreasing your unit cost of production.

Installations in hundreds of representative mills (including some of the South's largest) prove that Ragan Rings not only increase spindle efficiency but help to improve the quality of yarns and cord as well.

Why not enjoy the proven advantages of Ragan Rings in your own mill?

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One of The Country's
LARGEST PRODUCERS
of
SIZES, SOFTENERS
and GUMS

Thanks to the growing patronage of its many textile-mill customers, FRANK G. NORTH, INC., now is one of the largest, if not THE largest producer of warp sizes, softeners and gums in America.

Where sales are made in volume, purchases of raw materials can likewise be made in large quantities, enabling NORTH, INC., to take advantage of every break in the material market. Every saving thus secured will continue to be passed on to our mill customers.

When a NORTH Serviceman calls at your mill, he offers his services and cooperation with no obligations attached. Try him, won't you?

Manufacturers of warp sizes and softeners of all types, for use under any existing conditions; also Northol P.C., for use with any make of machine, for setting twist and conditioning yarns.

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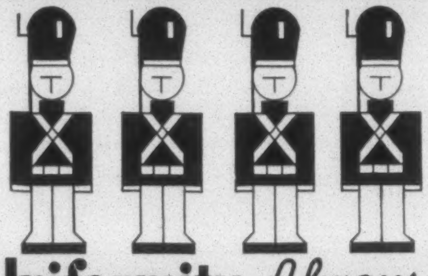

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Constant uniformity in quality and performance is guaranteed in every shipment of Seyco Sizing.

Its absolute dependability in this respect has earned for Seyco Sizing such consumer acceptance that the plant in which it is produced is now the largest and most modern specializing in warp sizing.

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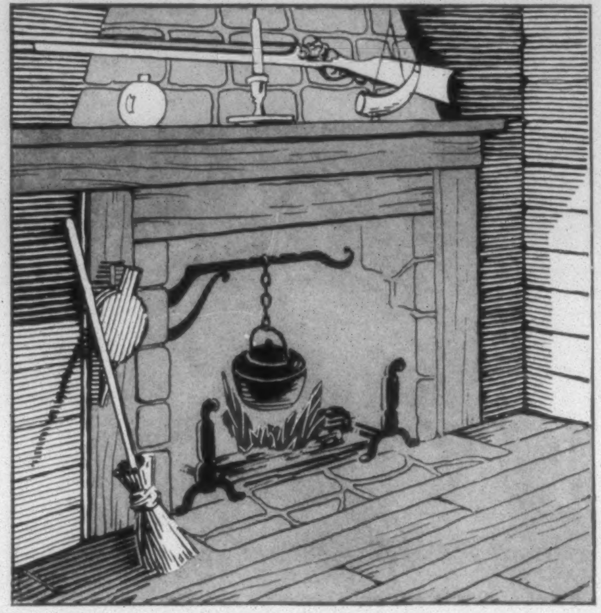

Lest we forget.

WITH the machinery of war so much in the headlines, many of us may minimize the importance of our individual contribution to the success of America's War Program. We must not forget that the American spirit has its roots in the home, in our every day lives. Crude Colonial cabins first sheltered the flame that blazed into a free America. Its battles were fought and won by poorly-clad, often ill-fed men whose chief weapons were faith and the muzzle-loading flintlock that rested over every fireplace. Union now with that spirit of America's infancy, will forge the will and might of a great Nation into a certain instrument of Total Victory.

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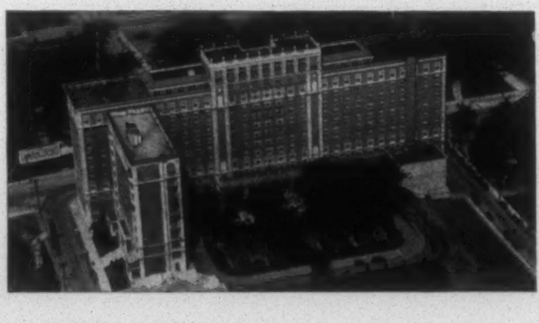

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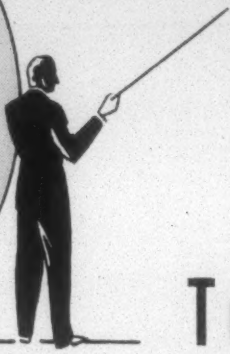
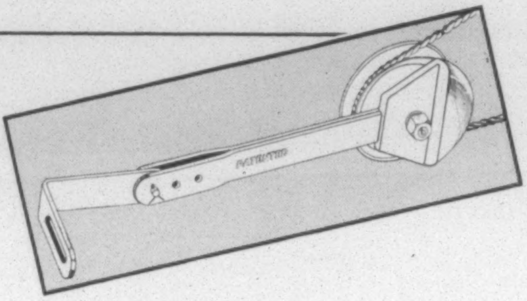
Your Mill

Can meet government specifications requiring uniform yarns. Uniform spindle speed can be obtained on your present band driven frames equipped with . . .

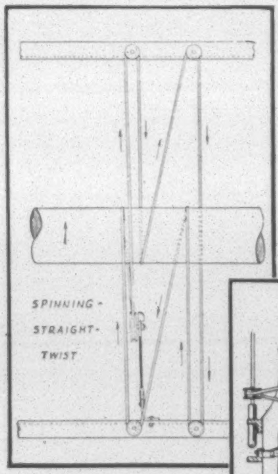




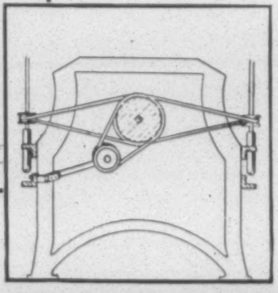
MEADOWS
Tension Pulleys

Equip Your Band Driven Frames with the Equivalent of Tape Drives at a Fraction of the Cost

• M-R-C Lubri-Seal Ball Bearing—deep-grooved, accurately ground and hardened. Fully protected against dirt and lint.



• Ease of installation is illustrated here. Only one 5/16-inch hole must be drilled through spindle ladder on bottom rail, to install one pulley for every four spindles.



- You'll get uniform twist—all the time, without soft or slack yarn caused by band slippage.
- Weather conditions won't affect band tension.
- These Tension Pulleys can be installed without doffing the frames.
- Installation of one pulley takes care of four spindles.
- Lubrication of these units is necessary only once a year. They are prelubricated and sold unconditionally guaranteed for a full year.
- Sturdily built, precision balanced, and with adjustable brackets, these pulleys will pay dividends under present conditions.
- Over 120,000 units serving more than 480,000 spindles are already in operation.

Write for Details
No Obligation for Stroboscopic Demonstration

MEADOWS MANUFACTURING CO.

DOUBLE LOOP HOOK BANDS • BALL BEARING TENSION PULLEYS • SEPARATOR SHIELDS AND SPECIAL STAMPINGS FOR TEXTILE MILLS

POST OFFICE BOX 4354 **ATLANTA, GEORGIA**

unless they pay tribute to him, is designated as a great man.

We have also noted the following newspaper dispatch:

> New York, April 13.—Dr. Frank P. Graham, president of the University of North Carolina, has petitioned President Roosevelt for the release of Earl Browder from Atlanta penitentiary where he has already served more than one year of his four-year sentence.

Earl Browder, disloyal American and the leader of those who were seeking to overthrow our Government and establish communism in the United States, was convicted of falsifying his passports in order to visit Russia and obtain orders direct from Stalin, but President Graham apparently does not believe that any communist should be punished for any crime.

Those who joined President Graham in his appeal for the release of Earl Browder were Paul Green, playwright, Prof. J. F. Dashiell, W. T. Crouch and Prof. Phillip Russell, who are the same group of University of North Carolina men who, a few years ago, rushed to the aid of the communists when they attempted to prevent the punishment of those who dynamited two cotton mills at Burlington, N. C.

Accumulate Repaired Tires

Many mills have employees who come from farms or from nearby villages and the only form of transportation for them are their automobiles.

The WPB now asserts that there will be no new automobile tires and no retreads available before 1944, if then, and there is little probability that textile mill employees, even those of mills on war orders, will be allowed to participate to any great extent in the allotments of tires and retreads.

Vulcanizers have been buying tires which have good or fairly good treads and were discarded because of cuts or breaks in the side walls and are repairing them. The Government has fixed the sales prices of such tires at from $4.30 to $8.10, according to the thickness of the rubber upon the treads.

Some mills are systematically buying all of these repaired tires they can secure and storing them for resale, at cost, to their employees when they no longer have usable tires for their cars. These damaged tires, if properly repaired and if run at less than 40 miles per hour, will run from 3,000 to 10,000 miles.

It is also possible to buy reliners which can be placed between the inner tube and the casing and will greatly prolong the life of a tire even after it is worn to the fabric. These reliners are made by cutting all the rubber from tires which have been worn down to the fabric.

Those mills which need the services of employees who live beyond walking distance should take steps to secure a portion of the rapidly diminishing supply of repaired tires and reliners.

Since writing the above we have noted the following newspaper dispatch:

> Washington, April 15.—Little hope is held out for industrial workers in war production areas like Greenville securing new tires when those now in use wear out, according to information which members of the South Carolina delegation in Congress have received from Leon Henderson, Price Administrator.
>
> "While we are fully conscious of the necessity of providing tires for workers in essential defense industries, we simply do not have enough rubber available to include such workers in the list eligible to purchase new passenger tires and tubes under the rationing program."

U. S. DEPARTMENT OF LABOR
WASHINGTON

National Committee for the
Conservation of Manpower
in war industries

April 7, 1942

Mr. David Clark
Managing Editor Textile Bulletin

Dear Mr. Clark:

There has just come to my attention copy of your March 1 issue containing a series of articles dealing with accident prevention in the textile industry. May I take this opportunity of congratulating you upon an excellent presentation of a subject whose importance has been greatly enhanced by recent national events?

It has been the thesis of this Division that industrial accidents are taking a terrific toll in life and limb and as a result are constituting a heavy drag upon our efforts to produce war essentials. It is through the publication of material such as that contained in your March 1 issue—the wider knowledge of the industrial accident problem will be had in industry and a fuller appreciation of how accidents are hampering our productive efforts.

If this Department can be of assistance to you in providing you with information in this connection, please do not hesitate to call upon me.

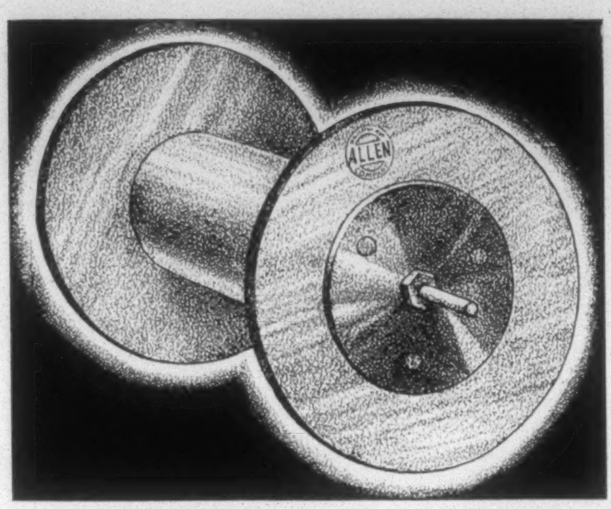
Very truly yours,
W. T. CAMERON
Chief Safety Adviser.

Restricted Sale of Textile Machinery

On page 22 will be found a very interesting statement by J. E. McDougall, of Charlotte, district manager of the Priority Field Service of War Production Board.

We asked Mr. McDougall to prepare this statement, as there has been considerable misunderstanding about the right of the textile industry to purchase machinery.

Why waste words?



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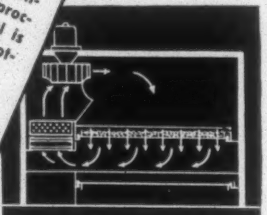
Impact
DRYER
for Raw Stock

- The Proctor Impact Dryer for raw stock is a radically new development for speedily, correctly and economically drying dyed or bleached cotton stock, cotton linters, rayon staple, dyed wool, etc.
- Heated air is impinged intermittently at high velocity on the material as it moves through the dryer.
- This intermittent impingement of air agitates the stock, keeping it in constant motion during the drying process, therefore the bed of material is dried uniformly on both top and bottom and all the way through.
- Unique concentration of drying medium makes possible exceeding compactness of machine.
- Besides saving a great deal of floor space, important savings are realized in time, labor, steam and motive power.



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Ansley Hotel, Atlanta, Ga.
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St. Charles, New Orleans, La.
Savannah Hotel, Savannah, Ga.
O. Henry Hotel, Greensboro, N. C.

DYEING AND FINISHING

Properties of Chemicals That Make Them Valuable for Textile Processing

By D. P. Quinn

PART VIII SILICATES

(See Part VII—Section A—Silicates—Editor)

Practical application factors—

(1) Kier boiling of cotton goods for whites and kier boiling of cotton goods for colored work.

(2) Scouring bath—The finishing off of rayon and cotton prints and dyed goods. Rinsibility of goods scoured with sodium silicates (meta and liquid).

(3) Preparation of rayons—All viscose goods, all acetate goods, and acetate-viscose goods.

(4) The use of silicates in peroxide bleaching of cotton, viscose and acetate rayons, and wool.

(5) The compounding of silicates in formulae with synthetic and mild alkalies possessing valuable water softening, emulsifying, and detergent properties and the possible opportunities for plant application.

(6) Less widely known and used silicates compounds and their special application.

  (a) Sodium Alumino Silicate—Kiering for white goods and colored goods.

  (b) Sodium Fluosilicates
  Ammonium Fluosilicates

In the previous article of this series[1] (1) Kier boiling and (2) Scouring bath factors were discussed. This article starts up with factor 3, Preparation of Rayons.

Preparation of Rayons

Preparation work on rayon fabrics has undergone many changes over the past few years. The formulae changes are due mainly to the continual introduction of new synthetic fibers both filament and spun. The various qualities of crepe fabrics constructed of spun or filament viscose rayon with pigmented acetate yarn are being processed according to the "price" received for the finished dyed fabric.

For the better quality processing and finishing job, the dyer can give more separate operations that will aid in obtaining better dyed and finished shades. These may be listed as:

(1) Desizing operation (allowed to stand for given period)

(2) Boiling off (crepeing) operation

(3) Washing or scouring operation

(4) Dyeing or bleaching operation

(5) Finishing of fabric

Even on quality workmanship a dyer must watch his costs carefully. So many rayon finishing plant chemists and dyers are changing from the more expensive boil-off (crepeing) bath formula, using chiefly olive oil or low titer soaps and sulfonated fatty alcohols to baths now "fortified" with 0.05% to 0.20% sodium meta silicate on a volume basis. A typical formula might read for a 4,000-gallon capacity boil-off bath (starting up formula):

200-250 pounds—Olive oil or low titer soap.
150-200 pounds—Sulfonated fatty alcohol.
20- 50 pounds—Sodium meta silicate.
20- 40 pounds—Sodium pyro phosphate.

For "feeding-in" liquor, a similar formula considerably more concentrated and using a higher percentage by volume of sodium meta silicate to replenish the boil-off or rinse-off bath. The use of sodium meta silicate acts as a "builder" and helps hold the boil-off bath to a uniform pH whereby the goods are given the desired crepeing effect without the danger that goes with many of the alkalies when used in the presence of acetate rayons. The addition of the sodium meta silicate also helps to buffer the scouring bath.

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[1] Part VII—Silicates—Properties of Chemicals That Make Them Valuable for Textile Processing. Textile Bulletin, March 15, 1942, page 41-B.

The scouring or rinsing off baths are usually prepared with considerably less soap and sulfonated fatty alcohol and fortified with a considerably higher amount of alkalies possessing good detergent values. The alkalies used must possess good detergent nature as well as very good rinsibility. In a final rinse bath, the creped goods may flow through a bath containing only hot water and sodium meta phosphate and this helps remove the excess sodium meta silicate solution as well as other agents before the goods enter into the final cold rinse bath before being removed and entered into the dyeing or bleaching operation.

On the less expensive acetate-viscose, or all viscose fabrics, a dyer may reduce the number of operations on the goods to:

(1) Desizing and allow the goods to stand for a given period.

(2) Enter goods into dyebeck ready for crepeing and scouring on beck. This is a risky operation but it is being done on "price" jobs. (On weight of goods 1:20 ratio bath).

1%	Sulfonated Alcohol
0.25%-0.50%	Penetrant
0.15%-0.25%	Sodium Meta Silicate.

Goods given scouring, bath dropped, ready for dyeing operation. A hot rinse given after scouring, then dyebath prepared. Goods processed by this less expensive method are well scoured but do not have the quality finish of goods processed by the longer and slightly more expensive method.

On all-acetate goods processed on the jigg, soda ash has been the most widely used cheaper mild alkali while the more expensive phosphate compounds and sulfonated alcohols have been used on better quality fabrics. Sodium meta silicate can be used with good results in combination with one of the phosphate compounds or a sulfonated fatty alcohol due to the fact that the meta silicate possesses such a high detergent action on acetate goods without great danger of saponification. There are newer types of silicates now being offered which are preferable to meta silicates.

The preparation of spun rayon fabrics (100% viscose) prior to dyeing and finishing has usually been carried out in a caustic soda bath for the purpose of shrinking the goods evenly. Investigation has shown that the proper use of sodium meta silicates will give a uniform shrinkage of the fabric as well as permitting the goods to be scoured quicker than when caustic soda is used.

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R. T. OSTEEN, Representative

Some finishing plants on the cheaper qualities of all spun rayon (viscose) goods prefer to prepare (shrink) and dye the goods on the dyebeck instead of preparing (shrinking) them on a cauticizer or open width creper bath, washing, and then dyeing on the dyebeck. The use of sodium meta silicate gives a slower but a more uniform shrinkage and when the goods have been properly rinsed there will be a uniform affinity for the direct rayon color during the dyeing operation.

The Use of Silicates in Peroxide Bleaching

Bleachers find that by painting the inside of the kier with liquid sodium silicate and then coating this with a thin syrupy solution of white portland cement, this coating of the iron kier protects the cotton goods during the peroxide bleaching operation, as it helps to prevent catalyctic reaction between the iron interior or kier and cellulose cotton fibers.

Cotton goods require usually a higher amount of liquid sodium silicate in the hydrogen peroxide bleach bath than other fibers. This is largely due to the nature of cotton fibers as a certain amount of the sodium silicate is required for detergent action in opening up the cotton fibers satisfactorily for thorough bleaching. Liquid sodium silicate is preferred to sodium meta silicate for peroxide bleaching operations as it gives a more stable bleach bath. Requirements for a satisfactory peroxide bleach bath is the use of the best quality purified liquid silicate. The impurities that upset the bleaching operation are: Iron, copper, titanium, and magnesium. Of these impurities copper, iron and titanium act as catalytic agents and cause an over bleaching of the cotton fiber where the contact has occurred between the impurity and the cotton fiber.

The purer the liquid silicate, the more stable and uniform the bleaching action of the peroxide bleach bath. Sodium silicate and hydrogen peroxide tend to combine or interact to form one compound which then releases the bleaching or oxidizing action of the peroxide slowly and then usually only on heating at higher temperatures.

These chemical and physical properties of liquid silicate of soda permit the fullest utilization of the peroxide bleaching value and does not allow it to be wasted. If there is too rapid a release of this oxidizing or bleaching action on the cotton fiber, the fibers may be tendered through formation of oxy-cellulose. The slower bleaching action helps to give better penetrated and more uniformly bleached goods than if a too rapid bleach was attempted.

For the standard closed type kier, the peroxide bleach formulae for cotton goods range on a 1,000-pound basis range from

15 to 30 pounds—100 volume Hydrogen Peroxide

10 to 25 pounds—Liquid Sodium Silicate

with the other agents such as penetrants and water softening compounds.

For open units running peroxide bleach, the formulae are increased considerably to obtain satisfactory "whites." The bleachers find that by constant checking of the water supply as to softeners and freedom from mineral impurities as well as the pH of the bleaching bath that uniformly bleached lots can be produced regularly. If these chemical checks are not made then the bleacher does not know where to start to locate trouble when a bleach lot goes "haywire."

New Outlets for Cotton Waste

New outlets for the numerous quantities of cotton waste resulting from the record-breaking consumption of raw cotton by domestic mills are being studied and developed in the mattress, twine and bagging trades, according to C. K. Everett, director of merchandising, Cotton-Textile Institute, New York City.

Speaking before the joint convention of the National Cotton Waste Association, Textile Waste Exchange, and the American Cotton Waste Exchange at Atlantic City, Mr. Everett said that steps have already been taken toward effecting the utilization of cotton waste in mattresses conforming to Federal Specification V-M-81a. A formal request has been made of the Government, he said, with specific recommendations for changing mattress specifications in order that cotton waste may be used in place of cotton linters which are high on the Federal list of critical materials essential for manufacturing of munitions.

The speaker explained that stocks of cotton waste have been expanding due to a combination of factors, chief among them the heavy consumption of the raw fiber by mills, the closing off by war of one-time important outlets in Europe and Canada, and the sharp reduction in pleasure automobile production. In normal years enormous amounts of cotton waste are used in the manufacture of motor cars.

Experiments, he said, are under way to develop low-cost twine of cotton waste which will be used to tie up bunches of such vegetables as beets, asparagus, celery, and carrots. There is required for such purpose, in place of imported fabrics no longer available, low-break tieing material which will hold vegetables together in bunches without cutting the stems and which can yet be easily broken by hand. Spinnable cotton waste, according to Mr. Everett, is being converted into yarns for bagging materials while unspinnable grades in increased quantities will be used for absorbent and wiping materials and as stuffing for furniture and pillows in place of kapok now becoming scarce.

He declared that the outlook for spinnable cotton waste is promising in that large quantities of part-waste bagging materials are needed to take the place of burlap materials imported from India which have been placed under rigid Government supervision due to short supplies here and the almost complete cessation of imports due to the spread of the conflict in the Far East.

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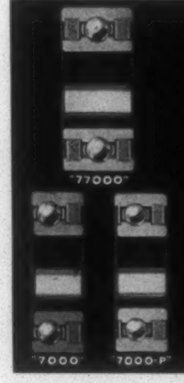

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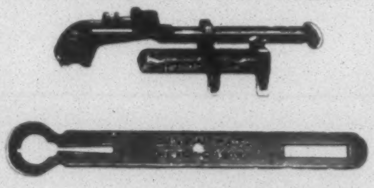

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Single Stage Process for Bleaching and Scouring Yarns

A single-stage process for bleaching and scouring yarns in stainless steel package machines, which forms a new application of Textone, was described by E. G. Fenrich, of the Mathieson Alkali Works, Inc., on April 10th at a meeting of the Philadelphia Section of the American Association of Textile Chemists and Colorists.

For a package machine having a capacity of 450 gallons, the following solution is used, according to Mr. Fenrich: synthetic detergent, 1-1/3 lbs.; Textone, 4 lbs.; tetrasodium pyrophosphate, 16 lbs.; available chlorine as sodium hypochlorite, 8-1/3 lbs.

All the chemicals except the sodium hypochlorite are dissolved and circulated for five minutes at a temperature of from 95° to 100° F. The hypochlorite is then added, and the circulation is continued at the same temperature for 45 minutes. Then the temperature is raised to 200° F. and circulation is continued for another 45 minutes. Bleaching occurs during the first part of the operation; scouring continues as the temperature is raised and the chlorine content of the bath is gradually depleted.

After this treatment, the yarn is washed in hot water at 180° F. for five minutes and again in water at 150° F. for five minutes.

Mr. Fenrich said the use of Textone to activate hypochlorite substantially reduces the total amount of chlorine consumed in bleaching.

OPA Cotton and Rayon Gray Goods Ceilings Being Violated

Willful violations of OPA cotton and rayon grey goods ceilings through manipulative schemes recently devised by some members of the textile trade must be halted immediately, Acting Price Administrator John E. Hamm declared April 3rd.

Preliminary investigation by the Office of Price Administration has confirmed reports from the textile market that some mills, which formerly sold "grey," or unfinished, goods exclusively, have been refusing to furnish such goods to their regular trade. Instead, these concerns have been requiring buyers to accept bleached or partially finished goods at exorbitant mark-ups above the established maximum prices for grey goods.

These buyers as a rule cannot use the goods unless they are dyed or printed and, in the past, it was their usual custom to purchase grey goods and then have them either dyed or bleached and printed in a single operation.

Mr. Hamm revealed that in one reported case, involving the sale of several million yards of textiles to a large retail distributor, a price of 17 cents per yard was exacted by a grey goods mill for "80-square" bleached print cloth. The ceiling at the time for these goods, in the grey, was 11⅝ cents and the bleaching cost was 1⅜ cents or less.

The intent of both the seller and the buyer to undermine OPA's grey goods schedule was readily apparent from reports of this transaction, the Acting Administrator stated. The buyer, due to scarcity of goods, lent himself to this questionable practice to secure an unfair competitive advantage over persons who have resisted the temptation to obtain goods by resorting to payment of this exorbitant mark-up.

In this reported instance, the goods were shipped by the grey mill to a finishing plant, where they were bleached and printed. While they were undergoing this process, they were sold by the grey mill to the retail distributor as bleached goods at the unconscionable price of 17 cents. The distributor, in turn, sold them in this fictitious form to a converter. The latter, upon completion of the finishing operation, then resold them to the same retailer.

Such deals are "out-and-out" violations of the schedule, Mr. Hamm said. He called attention to schedule provisions prohibiting evasion. "If full investigation bears out the reported circumstances of this transaction, OPA is prepared to take enforcement action," he added.

Other reported practices falling in the category of "avoidance" rather than of "evasion" are being studied

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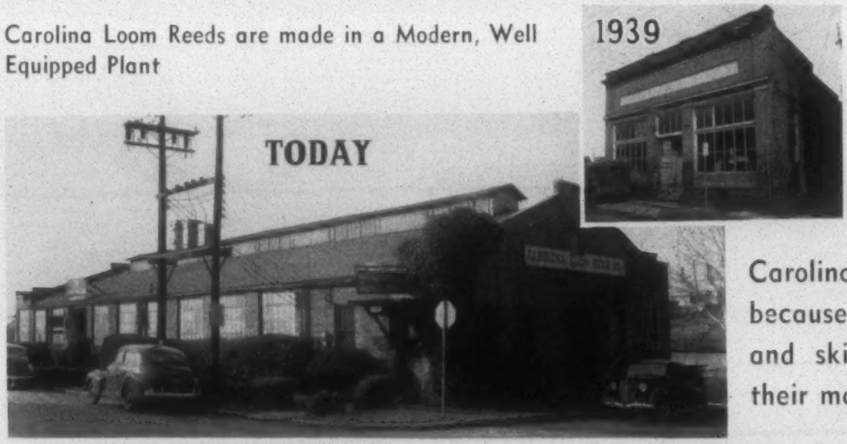

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with a view to limiting the charges which grey mills may make for finished and semi-finished goods, stated Mr. Hamm.

C. I. Collins To Be Executive Vice-President Of Wickwire Spencer Steel Co.

E. C. Bowers, president of the Wickwire Spencer Steel Co., announces that Carl I. Collins, elected on March 26th to the board of directors of the company, will be named executive vice-president at the next meeting of the board.

After graduating in Mechanical Engineering from the Georgia School of Technology, Mr. Collins entered the steel business with the Atlanta Steel Co. Prior to the entrance of the United States into the last World War, he was superintendent of the loading plant of the United States Cartridge Co. at Marner, N. J. In 1917, he joined the United States Army Air Service, in which he later became a flying instructor. Subsequently, he was attached to the General Headquarters Staff at Chaumont, France.

After the war he joined the Hyatt Roller Bearing Co. and in 1923 he became plant superintendent and later assistant to the vice-president of the Morris and Bailey Division of the Oliver Iron and Steel Corp.

Following acquisition of the Oliver Co. by the American Steel and Wire Co. in 1930, Mr. Collins was made general manager of the Morris and Bailey Division and, in 1933, was named general superintendent of the Cuyahoga Works where he had charge of the billet, rod, wire and cold rolled strip mills and auxiliaries.

In 1935 he was made manager of operations of the Worcester district of the American Steel and Wire Co., with mills in Worcester, New Haven and Trenton, N. J. He is resigning this position to join Wickwire Spencer.

Arthur R. Wachter Heads Crown Test Division of American Viscose

Arthur R. Wachter has joined the American Viscose Corp. as head of the "Crown" Test Division, it has been announced. Previously Mr. Wachter was for seven years manager of the rayon division of the print works of Pacific Mills, Inc., with headquarters at Lawrence, Mass., and prior to that was manager of the Williamsport, Pa., works of the National Silk Dyeing Co. In his new position, Mr. Wachter will supervise the American Viscose Corp.'s "Crown" Tested Plan, under which fabrics woven or knitted from the company's "Crown" brand rayon yarn and staple fiber are tested for service qualities.

Arm Caught in Cloth Machine

Lexington, N. C.—Henry Yarbrough, veteran textile empliyee, suffered rather painful injury when his arm was drawn between the rollers of a cloth machine at the Wennonah Mill. It was said to have been necessary to dismantle the machine to release him. The attending physician said it appeared there was no fracture but that muscular bruises were deep and painful.

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SUPERINTENDENT open for connection with carded yarn mill. Fifteen years' good experience with last employer. Eight years in superintendent's office. Four years as overseer in carding and spinning carded knitting yarns. Three years as superintendent plant making 20's to 30's ply and single in various putups. Age 35; married, one child. Good education and habits. Can furnish excellent references on yarn manufacturing. Address "Yarn Mill," c/o Textile Bulletin.

WANTED—Position as Overseer Spinning. Have several years' experience. Married; sober. Can furnish good references. Am not subject to draft. Address "C. H. M.," c/o Textile Bulletin.

WANTED—Two experienced Roller Coverers on cementing. Good pay. Steady job. Give references. Apply Carolina Roller Covering Shop, Lincolnton, N. C.

WANTED—Position as Overseer Weaving, or shift boss. 20 years' experience on sheeting, denims, prints, ticking, chambrays, coverts and cottonades. 43 years old; married. Want chance for advancement. Address "Weaving," c/o Textile Bulletin.

YOUNG MAN, 34, wants position with textile mill. Two years college training in textiles and twelve years experience, including production, office, and sales work. Address "H-34," c/o Textile Bulletin.

ADDRESS WANTED—Anyone knowing the address of Charlie Kinney or his mother, Mrs. May Helton, write Ben Daniel, Siluria, Ala.

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Georgia Tech Starts New Class in Textile Analysis, Testing

Atlanta, Ga.—A 16-week Government defense course in textile analysis and testing started at Georgia Tech April 7th. The course will be held three evenings a week, Wednesday, Thursday and Friday, from 6:30 to 9:30, and will consist of standard fabrics, fabric design and analysis methods, the study of fiber contents of fabrics under the microscope and chemical dyeing and testing.

POSITION WANTED
Former raw silk salesman with a background of thirty years' experience and now well established as sales agent for mills spinning or throwing hosiery yarns wishes to represent in Pennsylvania and New York one or two cotton yarn mills. Maintains with technical assistant and associate a fully equipped office in New York City. Raw silk sales has averaged thirty-three thousand bales annually. Immediate earnings not as important as the opportunity to build for the future.
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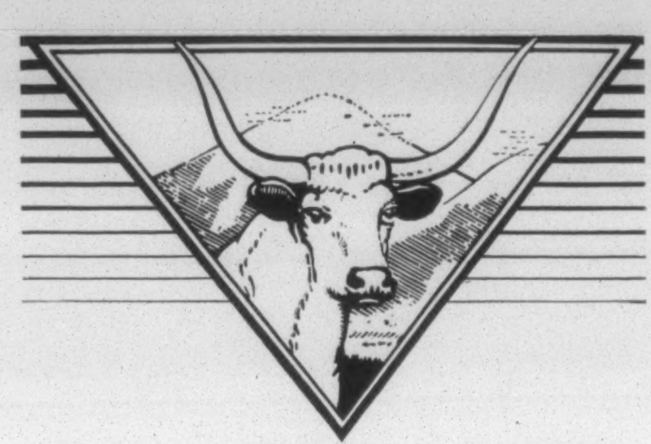

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Davison's Issues Annual Directory

Changes in the industry caused by the war are reflected in the Forty-seventh Annual Edition of Davison's Rayon and Silk Trades, which has just been issued. A separate division of the book is devoted to the manufacturers of powder bags. Ten firms are listed under this heading.

For the technical section of this year's edition, Donald D. Leonard has contributed "Silk Goes to War." This article has the sub-title "a time table of the conversion of silk from an article of beauty and adornment into strategic material required by the Government in military usage."

Mathieson To Have New Ammonia Unit

Plans for the immediate erection of a plant that will substantially increase their supply of ammonia and its derivatives were announced in New York by E. M. Allen, president of the Mathieson Alkali Works, Inc., New York.

In accordance with the terms of a contract that has just been signed, the new plant will be financed by the Defense Plant Corp. and will be erected and operated under lease by the Mathieson organization, Mr. Allen stated. The ammonia will be produced synthetically, through the use of a modification of existing methods, by combining hydrogen with nitrogen obtained from the air.

AATCC Seeking To Extend Research To Army Cottons

Chattanooga, Tenn.—The American Association of Textile Chemists and Colorists has offered to broaden its research service to cover the dyeing of cotton fabrics used by the military, Thomas R. Smith, of Albemarle, N. C., president of the national association, announced in a talk here before the South-Central Section of the Association.

Mr. Smith and P. J. Wood, of Carlton Hill, N. J., a former president of the American Association, were chief speakers at a dinner meeting of the South-Central Section held at the Read House. Textile men from Tennessee, Alabama, and Georgia were present.

Mr. Smith pointed out that the American Association of Textile Chemists and Colorists has been engaged in research work for the past 21 years, and the standards it has developed have been adopted by the American Standards Association and other organizations.

A year ago, he continued, the association set up a special committee to conduct research work in the dyeing of wool olive drab fabrics.

"The association is working closely with the Quartermaster Corps of the Army in improving the dyeing of these fabrics for Army use," Mr. Smith said. "We have offered to extend our research service to include the cotton fabrics used by the military."

The civilian, he said, is going to have fabrics which contain less color and lighter color, since various materials, including aluminum, used in making dyes, are now on the critical list.

Sectional Chairman Anderson announced the appointment of a special committee to select a speaker to present a technical paper, as representative of the South-Central Section, on some phase of the war effort, before the next national convention, which is to be held later in the year at Atlantic City or Philadelphia. The committee includes Walter Hadley, of Chattanooga, chairman; W. J. Kelly, Jr., Chattanooga; W. S. McNab, Knoxville; Homer Whelchel, Chattanooga, and William Harrison, Trion, Ga.

It was decided to hold the next quarterly meeting in Chattanooga, with the fall meeting to be held in Knoxville. It was indicated that because of the present emergency the South-Central section will not hold a summer outing.

Wellington, Sears Denies Big Profit On Govt. Contract

Protest by Harry L. Bailey, president of Wellington, Sears Co., against a statement read into the Congressional Record, is contained in a letter to Edmund Toland, chief counsel of the House Naval Affairs Investigating Committee.

Mr. Bailey's letter follows:

"We wish to register our protest against a part of the statement, as carried in the New York papers of March 23rd and 24th, which you read into the record of the hearing being conducted by the House Naval Affairs Investigating Committee.

"The specific part of such statement to which our protest is directed is the allegation that this company made a profit of 58 per cent on Navy contracts under review by you.

"Our letter and report of October 31, 1941, covered three contracts, under the terms of which we, as prime contractors, were obligated to deliver $231,220 worth of specified fabrics to the Navy. Delivery thereof was duly made, and as prime contractor payment of $231,220 was received by us. Our stated estimated profit on these three Navy contracts totaled $4,244, which is a profit of 1.83 per cent, not 58 per cent."

Institute Sends Out 10,000 Leaflets On National Cotton Week

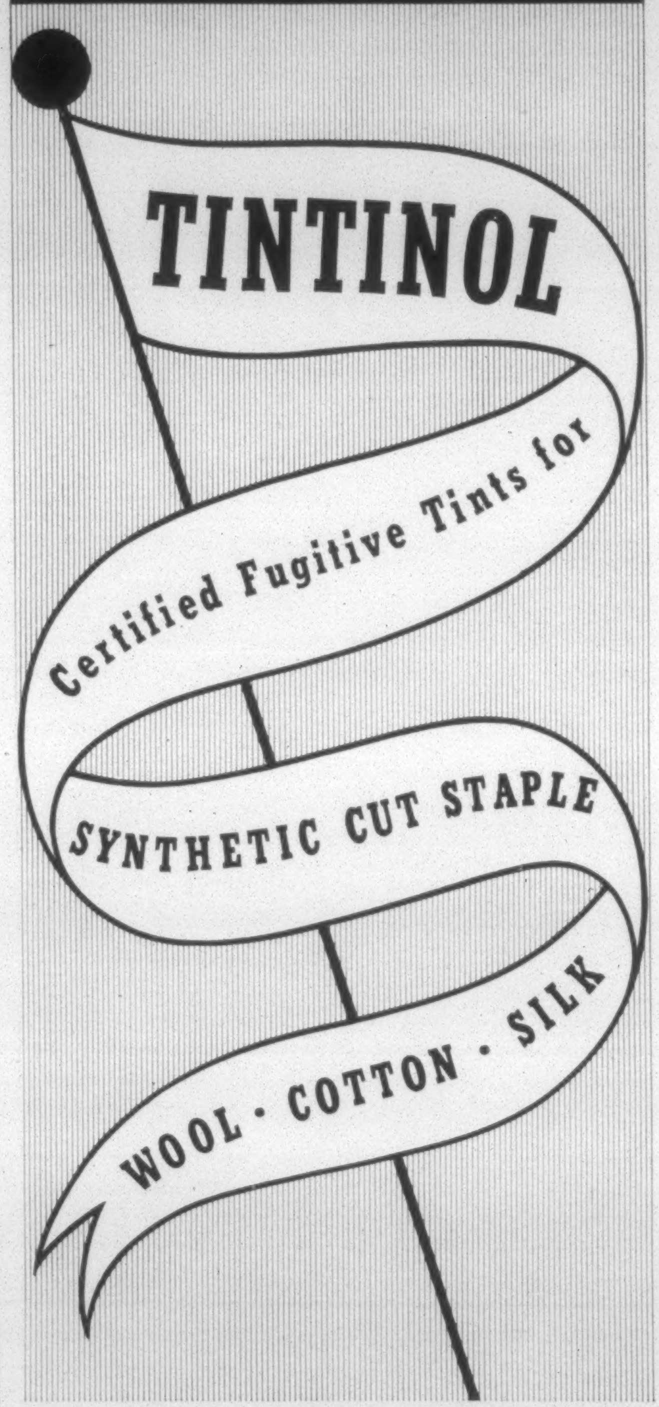
More than 10,000 leaflets on National Cotton Week are being distributed among merchandise and promotion executives, chain store organizations, wholesale dry goods houses, department stores, resident buying offices and retailers all over the country, according to C. K. Everett, merchandising director of the Cotton-Textile Institute.

Mr. Everett also makes known that many of the large chain store organizations are planning special presentation of cotton merchandise that will be attuned to current conditions.

Pepperell Gives Up Combed Percale Sheet During War

Pepperell Mfg. Co. is giving up the combed percale sheet business "for the duration," it has just been made known. The company states it is discontinuing its "Peeress" combed percale sheet during the emergency because of the scarcity of 1-3/16-inch staple cotton, which the Government needs in quantity. This staple cotton has been important to the Government in the spinning of yarns for some of the shirtings and uniform twills of the Army.

"THEY ARE ALL FUGITIVE"



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Cotton Good Markets

New York.—Latest reports indicate that orders have been placed for some 167,000,000 yards of cotton goods under the bidding opened March 31st which asked for 351,000,000 yards. It is felt in the trade that it is a good sign that the Government is again announcing awards of contracts for cotton goods, since the announcement of such awards must certainly do more good than harm. With the textile industry scattered as it is, and with such comparatively small plants, it is felt that publication of such information could be of little use to the enemy, and it serves a good purpose to the trade. From the publication of such information the mills and buyers can check on prices, extent of participation by other mills, and it removes any rumors of price gouging that might accompany secret Government purchases.

The number of cotton spindles active during March increased over the total for February. All told, 23,096,479 spindles were active at some time during the month, against 23,077,722 in February and 22,806,104 in March, 1941, according to the latest report of the Census Bureau. Relative to the number of spinning spindles in place, a steadily higher percentage has been active for several months and the number of idle spindles has been declining constantly. Despite the higher number of active spindles, cotton consumption in the month was reported at 966,000 bales by the Census Bureau, but the figures of cotton consumption do not always reflect the real spinning and weaving rate for the month. Consumption is counted by the Census Bureau as bales are opened, and opening operations do not always coincide with the calendar month.

Buyers of fine and fancy cloth are finding a necessity to be prepared for diminishing quantities from mills. Mills seem to be working on the principle that they prefer to concentrate on military orders. Now they are turning over more looms to making the constructions wanted for war purposes. Over the course of the next several months the program of most mills on combed gray goods is to run off civilian types. Gradually the effect of the change is being felt in diminishing quantities being made for the civilian trade.

In sheetings reports have been that efforts are being made to convert drapery looms to the manufacture of these goods. Some interests were said also to have been approached, and there was talk that an order might be forthcoming from Washington to this direction.

J. P. STEVENS & CO., Inc.

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Cotton Yarn Markets

Philadelphia.—Most mills and selling agencies are satisfied with the revised and amended yarn ceilings on cotton yarns, it is indicated.

Most combed yarn mills and distributors, after operating under an OPA ceiling for almost a year, now agree that the rules are clear and cover practically all points that the industry had sought to have changed or cleared up since their introduction.

This comment concerning the yarn ceilings was made on the basis of present wage rates and spinners explained that after the new 40c per hour rate goes in effect they will have to resurvey the entire situation to ascertain whether the wage increase will make imperative demands for ceiling price changes.

In general the carded schedule also has the approval of the trade but feel that there are still several matters to be cleared up. In this connection spinners of carded yarns say they would like to know where they stand on certain premium yarns such as warps and perforated tubes as well as for hard twist. The present rules do not set forth any definite figure that may be charged for the various sizes when sold in warps.

The percentage of carded yarns going into military orders is constantly increasing and a new peak in this poundage has been reached. The same thing is taking place in combed, although in this branch of the industry the portion going into military orders is much higher than in carded. This makes it increasingly difficult to place orders for almost any type of sales yarn for civilian use and most spinners now are refusing to take orders unless on a contingent basis for the civilian trades. When such orders as booked it is explained to the customer that circumstances may alter before the order is completely delivered, making it impossible to complete if more of the output is taken for the armed forces.

Spinners and merchants have been booking orders for high grade carded knitting yarns that are to be used in the manufacture of Army cotton knit undershirts on which contracts have been placed in the recent past. Reports are that a considerable volume of these garments will be supplied by firms that in the past were not large suppliers of such garments.

Distributors are reported to be booking larger orders from carpet and other plants that are converting to the production of cotton ducks either for the armed forces or for civilian use.

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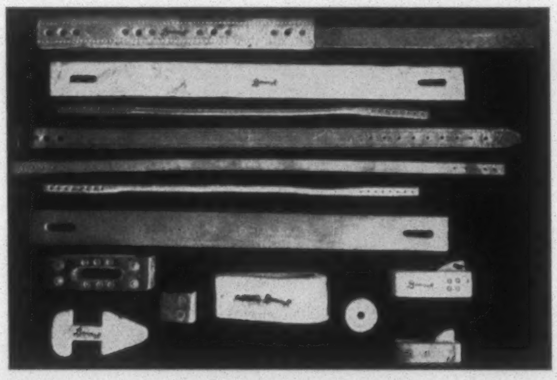

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We manufacture all types of textile leathers for cotton, woolen, worsted, silk and rayon looms.

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CAROLINA SUPPLY CO.
Greenville, S. C.

Reminiscences Of Ye Olde Cotton Factory

(*Continued from Page 20*)

However, this arrangement soon gave way to the small or more which proved a much more desirable system.

The steam boiler of that period was of the horizontal return tubular type in which was placed a group of steel tubes on "flues" about 3 to 3½ inches in diameter. These flues were placed inside a steel "shell" made of sheet steel about ¼ or more inch thick, cylindrical in shape, about 15 or more feet long and about 3 or more feet in diameter. The flues were made water-tight at each end so that the water inside the boiler covered the tubes. Thus the heat from the furnace under the boiler also circulated through the tubes or flues from one end to the other, thus a sufficient amount of steam was produced for both power and heating.

It was soon discovered that a much better plan for making steam more economically was a possibility and the water tube boiler became a reality. In this case the water circulated through tubes which were placed in an inclined position with the heat from the furnace circulating around instead of through them.

The mechanical department, consisting of the power plant, machine and repair shops, carpenter and woodworking departments, fire department and building and village upkeep was supervised by the chief engineer and master mechanic and his assistant or "second hand" who directed the duties of the "section hands"—(heads of the various sub-departments or sections) in the mechanical department.

This system of plant management was maintained throughout the entire mill.

When and where gardening facilities were available the family vegetable supply proved a very important item in the economic program and very often a surplus of high quality products from these "mill village" gardens were seen on the town and city markets where they were soon taken up at top prices.

It sometimes happened that a newly organized mill company would prefer a location near the suburbs of a town and use steam for the motive power. Also this arrangement added to the convenience in shipping and transportation facilities, and at the same time placing the residents of the mill village in closer touch with "city life." Instead of the usual small mill of 5,000 spindles, or thereabouts they had been increased to 10 to 20 thousand spindles with sufficient carding and weaving equipment to balance the number of spindles desired.

During the middle and late 90s the idea of hydro-electric power came to the attention of the mill engineers, the possible advantages of which were very soon realized. It was found that a power plant could be installed at a suitable site on a year-round water course and by means of electric dynamos or "generators," and the proper wiring, motors, transformers, etc., power could be transmitted to the mill situated many miles distant, adding to the economic advantage of mill operation.

With the advent of these improved conditions came a demand for an increase in personnel for the operation of the new mills so the question "what to do?"

Recruiting Workers

Dependable men were detailed to go and make a survey of the more remote agricultural districts, even to the mountainous regions of Southern territory with the result that in a short time whole trainloads of families with their belongings were moving from rural and mountain areas into the sphere of industrial life.

These "raw recruits" required training, so a system of promotion was created and very soon our erstwhile doffers and spinners, card, picker and drawing tenders, spoolers, warpers, weavers and all the others were being promoted to "teachers," thereby opening a new field of endeavor and bringing into line an efficient type of textile operatives.

A method of instruction was adopted which enabled the teacher to perform regular tasks, keeping the "pupil" close by so explanations could be easily made and eventually these same "raw recruits" would be performing the tasks taught them, on their own accord, producing more and better goods, enlarging payrolls, facilitating marketing conditions, enhancing material and spiritual growth and ever striving to add their "bit" toward serving a worthy purpose.

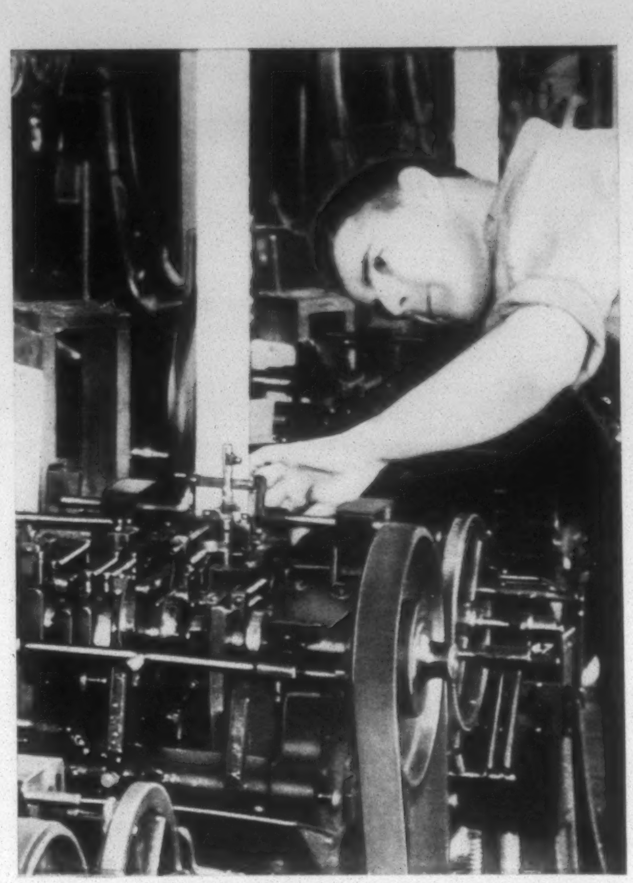
Sprinkler Pots

Prior to the mechanical or artificial "humidifier" when it became necessary to moisten the atmosphere inside the mill quite a variety of methods were used and sometimes a serious situation would develop. The cotton fibre is a peculiar substance and requires a very precise atmospheric condition in which to function. Too damp or too dry, too hot or too cold causes trouble. Sprinkler pots of the 2-gallon style were part of the standard equipment. When work on a cold, dry windy morning the sprinkler pot was brought into action, using hot water sprinkled on the floor and under and around machines to eliminate "static" electricity which soon disappeared if attacked in time. This trouble was usually more prominent around the cards but it had to be treated in all parts of the plant.

Dry hot weather required a similar treatment with cold water. If the weather was too damp it required a drying out by artificial (steam) heat. Some very amusing experiences sometimes accompanied these periods of "hand-made air-conditioning," as an over-enthusiastic member of the squad would make a misstep on a wet place, slipping, throwing the sprinkler pot with its remaining contents into the machinery supposed to be protected—an interesting situation for the other members of the squad.

These uncomfortable experiences soon disappeared with the installation of the automatic humidifier. This outfit consisted of a high pressure water pump and a high pressure air pump, an air compressor acting in conjunction, and forcing the water through a tiny nozzle about 1/64 inch in diameter, thence against a conical base about 6 to 8 inches high, 8 or 10 inches in diameter at base and running up to a point at the top. The humidifier was also fitted with a fine strainer so the water used was as nearly pure as possible.

The stream of water was pointed directly against the point of the "cone" which was placed in the center of the bottom plate, a circular pan-shaped disc about 2 feet in diameter, forming a fine mist or vapor, creating a very pleasant and comfortable condition in the entire plant. This system of humidification was under the supervision of the chief engineer and master mechanic. Another very important link in the chain of human progress.



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Lewis Warp Beam Trucks

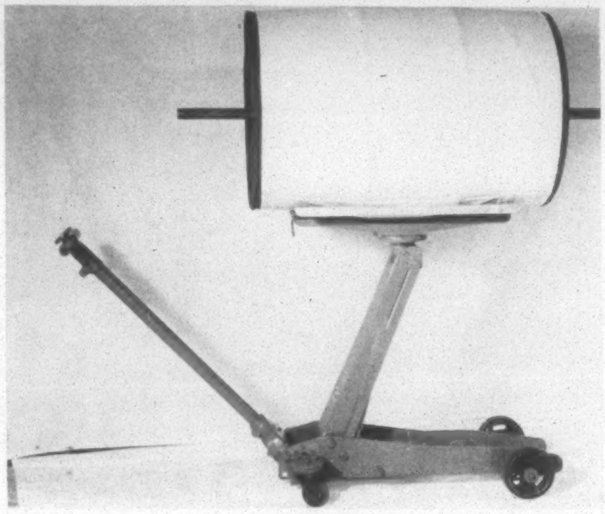
J. W. Lewis Co., of Spartanburg, S. C., have developed a line of warp beam trucks and cloth roll trucks which cotton mills have found to be very useful and satisfactory.

The warp beam trucks are ideal for handling warp beams up to 24 inches in diameter and up to 60 inches in length in cotton mills and other textile plants.

It is especially designed for this purpose and is sturdily constructed of steel, compact, and easily handled and operated in weave shops where there are post aisles or narrow passageways which interfere with handling of large warp beams. The beams are lifted to an elevation of 34 inches by suitable hydraulic means, which permits transporting the beam down the narrow aisles, carrying the beam above the whip roll on the looms on each side of aisles. The beam is then lowered in bearings on loom gradually by hydraulic means, eliminating most of the lifting on the part of the operator, preventing accidents from over-lifting.

They also have a Big Boy Truck for large warp beams. Having a diameter of 24 inches and under, with a length of from 60 to 120 inches, this truck is heavily constructed of steel throughout, is very compact, and all wheels are equipped with roller bearings—easily handled and operated in weave rooms where there are post aisles or narrow passageways.

Their Model M Cloth Roll Trucks are especially designed for handling large, heavy rolls of cloth, any length. It is heavily constructed of steel throughout, and has lifting and carrying capacity of 4,000 pounds, with suitable hydraulic means to raise or lower its load with a range of heights from 7 to 27 inches. The cradle supporting the roll is curved to hug the roll of cloth, and swivels on its base, permitting the roll of cloth being carried and placed on or off the different machines used. For instance, the operator can raise the cradle up to the roll of cloth, then raise the roll clear of the machine and remove it by hydaulic means. The roll can then be taken to the inspection machine and lowered into its bearings. By the same operation the operator can remove the roll to the folding machine and place it in its bearings. All of these operations are performed by hydraulic means, thereby relieving the operator of any lifting, eliminating any possibility of the employee getting hurt by lifting heavy rolls.



Lewis Warp Beam Truck

They also have a Model N Cloth Roll Truck which is tall and narrow, has only a 14-inch tread, and raises to a height of 38 inches by hydraulic means, and lowers to seven inches. The narrowness permits passing down the weaver's aisle, the height permits passing over all working parts in weaver's aisle. Truck can be taken down aisle in high position, then lowered beneath the roll of cloth that is to be taken off. When cloth is cut loose the truck will raise it above the loom and pass down the aisle, carrying it above all moving parts on looms.

Mills which have been using Lewis Warp Beam and Cloth Roll Trucks report that they are sturdy, yet operate easily and that they not only reduce the strain upon employees but are an insurance against accidents.

Control of Package Size Improves Strength and Evenness of Yarn

(*Continued from Page 14*)

The size of the bobbin at the slubber should be governed by the hank roving being made. A 12x6 slubber should be used up to .80 Hk., and a 10x5 slubber on finer rovings. A 12x6 package of fine rovings is ho heavy that an excessive amount of twist must be put in to carry it in the creel of the next process with the result that the roving will not draft properly.

In the intermediate process, a 9x4^2 or a 10x5 frame is recommended for up to 2.00 or 2.25 hank, changing to an 8x4 or 7x3^2 package for roving up to and including 6.00 Hk. From 6.00 Hk. up to and including 16.00 Hk., it is advisable to use a 6x3 Jack frame.

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If these suggestions are followed, a maximum size of package will be obtained with a minimum of twist, and the roving will run properly in the next process creel.

The proper size package for spinning depends on several variables, such as the kind of machinery used, the type of yarn being spun, and the quality and staple of the material being processed. However, the most important factor in determining package size is again the yardage, rather than the weight of the package. By establishing the correct yardage per package in relation to the number of the yarn being spun, the most desirable balance of efficiency and cost can be maintained.

Large package spinning offers many advantages, but it will also present difficulties unless constant attention is given, not only to the usual problems of maintenance, but to those lesser factors which can be overlooked, with older methods, without greatly affecting results. For example, rather than keep traveler cleaners in proper adjustment, a larger circle traveler than the yarn size would call for has sometimes been used. By thus using one bad practice to correct another, excessive traveler changing and slowed production would offset the advantages of large package spinning.

Another factor often overlooked is the size of the package in the spinning creel. If the package is too large for the roving number, it will require an excessive amount of roving twist in order to turn the package without breaking back. This in turn will make it necessary to overweight the top rolls, or to spread beyond staple lengths being used. The result is a weakened yarn of poor appearance and often an increase in end breakage, which will more than offset any saving made in previous processes by building up the package to excessive weight.

Poor supervision at the spinning process must, of course, be held responsible for poor work, but the most expert supervision can do little to improve work that is not properly prepared before coming to this process. For this reason, humidification also becomes more important when running large packages, because the humidification in the spinning room can only be expected to *maintain* the same moisture content in the finished yarn that is already in the roving in the spinning frame creel, and cannot make up any existing deficiencies.

A number of mechanical improvements have been developed in the past few years which have made large package spinning more practical. The reciprocating thread board is one. It provides control of the angle of the traveler at any point of the ring rail traverse. Another is the ball bearing spindle, which practically eliminates vibration. More accurate machining of all the parts in modern frames has also contributed to improved efficiency.

When all the factors are considered, it is generally agreed that the large package is the best package only when it can be run with a minimum of end breakage, when pounds produced per spindle are as high as possible, and when the quality of the yarn is up to the standard set by the mill. The best results will be obtained, not by setting an arbitrary size for packages, but by finding out by practical test what size can produce yarn of the strength and evenness desired without sacrifice of general efficiency.

(Reprinted from "The Traveler," publication of the Victor Ring Traveler Co.)

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The Manufacturing Quality of Irrigated Cotton

(*Continued from Page 12*)

In other cases, mills that used 100 per cent irrigated cotton or 50-50, or 40-60 mixtures of irrigated and rain-grown, were obtaining satisfactory "running qualities" and strengths of yarns and fabrics.

In the Department's tests, neither the Delta nor the California cottons produced yarns that were consistently stronger for all grades and staples. An average of all the yarns spun from each growth showed that the Arizona-New Mexico-Texas samples produced yarns about 5 per cent weaker than the other two growths.

The story was somewhat different with respect to tire cord strength. Here the results of the tests showed the cord from the Delta cotton to be about 6 per cent stronger than the California cord, and 8 per cent stronger than the Arizona-New Mexico-Texas cord. Tire cord reflects to a greater degree the fiber strength of cotton than does single yarn strength, and the rain-grown cottons tested were found to be 4 or 5 per cent stronger in fiber strength than the irrigated cottons.

Fabric strength tests made in the Department's study provide still another comparison of strength. For heavy sheeting, California irrigated cotton gave higher tensile strengths than Delta rain-grown cotton in two of the three staples, with a reverse situation in the third. Both growths gave definitely higher fabric strengths than the Arizona-New Mexico-Texas irrigated cotton.

From this discussion of strength, it is clear that the relationships will vary, depending upon whether one is considering fiber, yarn, cord, or fabrics strengths. If it is necessary to draw an overall conclusion, than we must say that the bulk of the available evidence shows that rain-grown cotton is slightly stronger than irrigated.

Yarns Rough and Neppy?

(4) Are yarns spun from irrigated cotton rough and neppy? Unfortunately, the answer to this one seems to be "In most cases, yes, as compared with rain-grown cotton." In fact, this is the one item in which irrigated cotton seems to live up (or down) to its reputation among critics. Even here, there are exceptions. For example, in one mill that I visited recently, irrigated cotton was being combed, and this process removed practically all the neps in it. As a result, the yarns and fabrics were exceptionally clean and smooth. Note, however, that this was a fine goods mill using combers. In nearly every other case that I saw, the cotton was being put into carded goods (that is, without combing) and the yarns and fabrics were definitely neppy. Neps are usually so small that many of them pass through the cards without being removed by the wire clothing, and once they escape this machine they are in the yarns and fabrics permanently, unless the cotton is further cleaned by combing. The majority of cotton mills are not equipped with combers, however, as these machines are costly to installed and operate.

The objection to neps in yarns and fabrics is chiefly due to the poorer appearance they cause, although the presence of neps in sewing thread would constitute an obvious mechanical disadvantage. Some cotton manufacturers say that neps are likewise detrimental in tire cord and mechanical fabrics, but this may be more psychological than real.

Neps show up in sheeting and other white fabrics in a way that gives an effect of cheapness instead of high quality. In colored fabrics, as will be discussed more fully in a few moments, they are even more noticeable.

In the Department's tests, the yarns and fabrics made from the irrigated cottons were noticeably of poorer appearance than those made from rain-grown cotton. It was quite easy in most cases to distinguish between the two growths in the gray, bleached, or dyed fabrics.

Is Irrigated Cotton Hard To Spin?

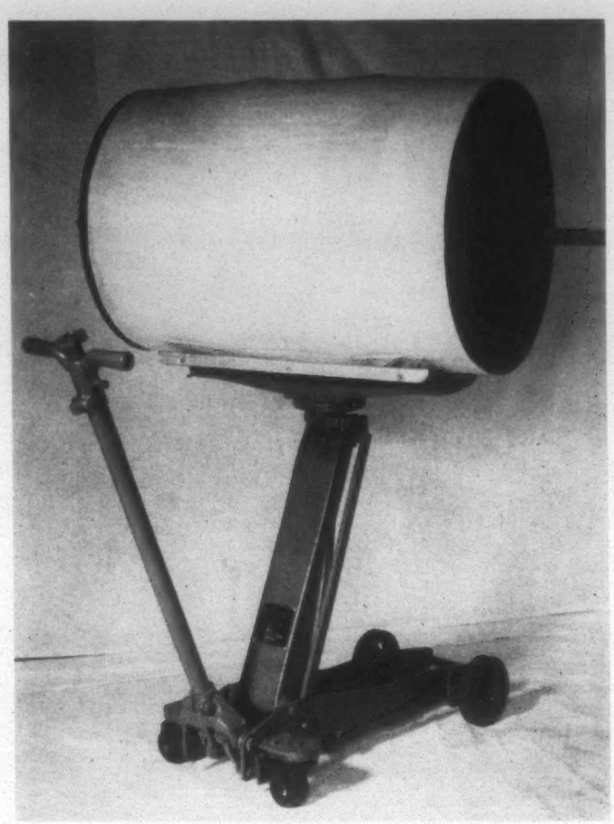
(5) Is irrigated cotton "hard to spin?" In the past, isolated cases have come to our attention in which irrigated cotton was said to possess objectionable "running qualities" such as excess of short fiber, or "fly," a tendency toward roller lapping during the spinning processes, and excessive end breakage during spinning. From our recent discussions with mill men, however, not a single case was found where any difficulty was being experienced in these respects. There are numerous and varied theories in existence in regard to the advantages of both high and low humidities when spinning irrigated cotton. My own observation to date is that irrigated cotton behaves about like rain-grown cotton insofar as its spinning behavior is concerned. In our tests, detailed records were kept of the spinning behavior of each sample at each stage of manufacture, and a summary of these notes reveals that no difficulties were encountered in handling the cotton.

Curiously enough the only criticism of the spinning behavior of irrigated cotton heard in the course of the recent brief survey had to do with the packaging of the cotton. It appears that during the past year or two, a considerable quantity of irrigated cotton has been received in the Southeast in high density bales. Many of the mills that received such cotton had neither the equipment nor the experience to handle these high density bales, and had to resort to various devices, some crude and others ingenious, to handle them. It is our understanding that this cotton was probably compressed to high density with the idea that it would be shipped by water, but that circumstances led to its being shipped overland to the Southeast. In any event, the difficulties were not very serious, and the mills understand that in the future such cotton will probably arrive in the form of the standard density bales that most of them desire.

Dyeing Difficulties

(6) Does irrigated cotton present any special difficulties in regard to dyeing? Commercial dyehouses have found that fabrics made from irrigated cotton do not absorb dye to the same degree as those made from rain-grown cotton. That is, when dyed in the same bath, the irrigated fabrics take a slightly lighter shade, generally speaking. It is a simple matter to alter the concentration of the dye bath to obtain the desired shade with 100 per cent irrigated cotton, but if a fabric were made partly from irrigated and partly from rain-grown cotton, it is possible that a somewhat mottled effect might result in some cases.

This is probably the appropriate point at which to consider briefly the question of specifications for Government purchases. From time to time during the past three years, complaints have been received, usually from this area, that the Government is discriminating against irrigated cottons by stating in various specifications that it shall



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not be used. Within the last month, I have taken this matter up with those concerned in both the War and Navy Departments, and have been definitely advised that they do not have a single specification that prevents the use of irrigated cotton. In fact, these specifications deal with the strength and other characteristics of the fabrics, and with one exception do not relate to the raw cotton in any particular so far as we have been able to find. The one exception is War Department Specification P. Q. D. No. 33-A, for uniform twill cloth, in which paragraph C-2a reads: "*Cotton*—The cotton shall be of suitable length of staple and grade to meet the requirements of this specification. When irrigation-grown cotton is used, it shall not be blended with other cottons at any stage in the manufacture of this fabric." Such a specification may not be out of order in view of the experiences of commercial dyehouses in connection with this problem, although specifications relating only to the end product, without reference to irrigated cotton, should produce the desired effect.

The results of the Department's tests, which included the dyeing of many samples of both irrigated and rain-grown cotton fabrics with seven different dye baths, confirm the findings of commercial dyehouses.

More serious than the slight difference in shade is the difficulty caused by the presence of neps in dyed fabrics made from irrigated cotton. For some reason, these generally take on a considerably lighter shade of color, and become very prominent, particularly in the darker shades of fabric. The effect is anything but pleasing, and constitutes a serious objection to the cotton. A certain amount of assistance in overcoming this feature is obtained in some finishing plants by subjecting the fabric to a light mercerizing treatment prior to the dyeing process. This is said to result in a more uniform shade in neppy fabrics, but of course it adds to the cost of producing the finished goods, and so it is not a universal practice.

This, then, is the story of what we have found to date about manufacturing quality of irrigated cotton. Taking the well-known criticisms one by one, we may summarize the matter as follows:

(1) Irrigated cotton is not consistently more wasty than rain-grown cotton;

(2) Irrigated cotton appears to be slightly more irregular in staple than rain-grown cotton, length for length;

(3) Irrigated cotton is slightly weaker, on an average, in the strength of its fibers and of tire cord made from it, but not necessarily so in the form of yarns and fabrics;

(4) The yarns and fabrics made from irrigated cotton are in most cases neppier and of somewhat poorer appearance than those made from rain-grown cotton. (At least one mill that we know of, however, is making combed fabrics of excellent quality from irrigated cotton.)

(5) Irrigated cotton is no more difficult to spin than rain-grown cotton;

(6) Although fabrics made from irrigated cotton appear to absorb dye to a somewhat different degree from rain-grown cotton, this can be easily corrected by simple changes in the dye baths. But mixtures of irrigated and rain-grown cotton when dyed

may differ to the extent that an uneven or mottled effect is produced. The chief difficulty in this problem is that neps are prominent in many dyed fabrics because they usually assume a definitely lighter shade.

Is There a Solution to the Problem of Irrigated Cotton?

Experiments conducted by the U. S. Department of Agriculture lead us to believe that the difficulty with neps and the slightly weaker strength of irrigated cotton, is definitely associated with the variety of cotton that is grown. When seed from the strain of Acala, popular in the Southwest, are planted in various sections of the belt where cotton is grown under rainfall conditions, the resulting lint has been found by our laboratories to have practically the same characteristics it does when grown under irrigation. Moreover limited experiments have shown that other varieties or strains of cotton from the rain-grown part of the cotton belt may produce, under irrigation, lint of a somewhat better quality than the currently grown strain of Acala.

In essence, therefore, the problem may be said to boil down to the question of whether the cotton growers of the Southwest are willing to continue to sacrifice quality, to the extent that they seem to have sacrificed it for the extremely high yields obtained in this general area.

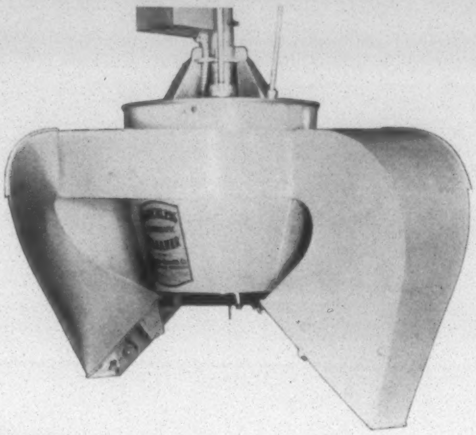
There is another alternative, however—that of finding a cotton that will produce both superior yield and high quality, or through selective breeding, of eliminating the objectionable features of the present cotton. This program would include the planting of experimental plots with varieties or strains that seem to hold promise, and the testing of the lint by some reliable mill or laboratory. In connection with the testing part of the job, some of you may know that the U. S. Department of Agriculture is now authorized and equipped to make fiber and spinning tests for cotton breeders and others, on a fee-per-sample basis. At least one producer-breeder of irrigated cotton has already taken advantage of this cotton testing service. Of the samples he has submitted to us, two appear to hold exceptional promise from the quality point of view.

Much more experimental work needs to be done by all concerned—not just by your State and Federal governments. In the meantime, do not forget that cultural and ginning practices have an important influence on quality. By concerted efforts to improve these phases of cotton production, you can certainly improve the average quality of your crop.

No one can say that a better cotton cannot be found for the Southwest, and it would certainly seem to be worth looking for. If and when you find a better cotton for this whole area, then you must conduct a carefully planned educational program to prove to the mills that you have it and to make them want it. And incidentally, don't forget to call it something beside "irrigated cotton" when the time comes!

Large Order for Army Quilts

It is reported that the Army has recently placed a large order for Army quilts which are to be stuffed with comber waste from peeler cotton. It is stated that the order will require 31,000 bales of comber waste.



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FALL RIVER, MASS.

New Textile Minimum Wage Now 40 Cents Per Hour

(*Continued from Page 16*)

dependent wholesaler or employees of a manufacturer who are engaged exclusively in marketing and distributing products of the industry which have been purchased for resale: *And provided further,* That where an employee covered by this definition is employed during the same workweek at two or more different minimum rates of pay, he shall be paid the highest of such rates for such workweek unless records concerning his employment are kept by his employer in accordance with applicable regulations of the Wage and Hour Division.

§ 619.6 *Effective Date.* This Wage Order shall become effective April 20, 1942.

Signed at New York, New York, this 2nd day of April, 1942. Sections 619.1 to 619.6, inclusive, issued under the authority contained in Sec. 8, 52 Stat. 1064; 29 U.S.C., Supp. IV, Sec. 208.

L. METCALFE WALLING,
Administrator.

Supplies Inventory Limited

Inventories of 19 kinds of supplies, whether in the hands of wholesalers, distributors, jobbers, dealers, retailers, or branch warehouses are strictly limited by Suppliers' Inventory Limitation Order L-63, issued April 6th by the Director of Industry Operations.

Wholesalers and dealers affected by the order who are located in the eastern and central time zones are required to limit their inventories to twice the dollar value of sales of the specified types of supplies which they shipped from stock in the second preceding calendar month. Suppliers located in other time zones may have inventories equal to three times the corresponding amount. Shipments made directly from producers to customers in which the distributor acts only as an agent may not be included as a basis for calculating permissible inventory.

Suppliers whose total inventory at cost is less than $20,000, and less than $10,000 for any one of the listed types of supplies, are exempt from the terms of the order. Special provision is also made for inventories of seasonal supplies.

This order supersedes Suppliers' Order M-67, covering plumbing, heating and electrical supplies, which is revoked.

The types of supplies covered by Order L-63 are as follows:

Automotive supplies, aviation supplies, *builders supplies, construction supplies,* dairy supplies, *electrical supplies,* farm supplies, foundry supplies, grain elevator supplies, hardware supplies, health supplies, industrial supplies, *plumbing and heating supplies,* railroad supplies, refrigeration supplies, restaurant supplies, *textile mill supplies,* transmission supplies, welding and cutting supplies.

Suppliers affected by the order are required to keep records of their inventory and sales on Form PD-336, and to keep this form in their files for at least two years.

Separate records must be kept for each type of supplies handled by the distributor or dealer.

Inventories of material frozen by the "L" or other orders should be included in the inventory records. The provisions of L-63 do not relieve suppliers from responsibility of compliance with any other applicable order or orders.

Suppliers affected by the new order whose inventories on hand at the time the order was issued exceed the permissible maximum, must not receive any deliveries of such supplies until the inventories are reduced below the maximum. However, when inventories are below maximum, suppliers may receive deliveries of minimum commercially procurable quantities, even though such deliveries would raise their inventories above the maximum.

Textile Photomicrography By Fluorescent Light and Development of Fine Elastic Yarns

Use of fluorescent lamps in making photomicrographs of textiles, and fundamental and applied research on latex which led to development of fine elastic yarns and fabrics with two-way stretch are described in the April issue of *Textile Research,* official publication of Textile Research Institute, Inc., and the Textile Foundation. Use of fluorescent lamps in textile photomicrography has several advantages, according to an article by Henry H. Broadfoot and Edward R. Schwarz, of the Textile Division, Massachusetts Institute of Technology. Fluorescent lighting avoids over-heating of the specimen, uneven lighting, and streaks. The tubes and reflectors are inexpensive and the lamps consume little electric energy. Fluorescent lighting is particularly advantageous in making photomicrographs of relatively small magnification, such as those used for recording defects in textiles.

Fundamental and applied research on latex, carried out by United States Rubber Co., led to the development of an elastic yarn of such fineness that it could be knit on fine-gauge machines or woven into sheer fabrics. This yarn, known as Lastex, was quickly adopted by the textile industry for use alone or in combination with non-elastic yarns in a wide variety of fabrics, including bathing suits, foundation garments, socks and anklets with self-supporting tops, dress goods, sweaters, upholstery fabrics, slip covers, tapes and braids. Temporarily, little latex or rubber is available for civilian purposes; but research on production of elastic yarns has not stopped, and when the war is over elastic yarns even better than those produced hitherto will be made available to the textile industry.

Among other features of the April issue of *Textile Research* are a research report of the results on cotton yarn appearance and strength obtained by increasing card speeds; descriptions of new tests for determining the percentage of casein fiber present in mixed goods and for determining the amount of tendering which will take place in sulphur-dyed yarns and fabrics under ordinary storage conditions; and a discussion of the value of business research as it relates to marketing, industrial relations, and public relations.

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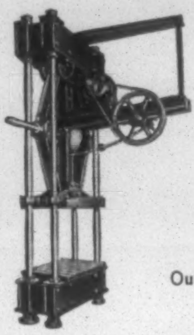

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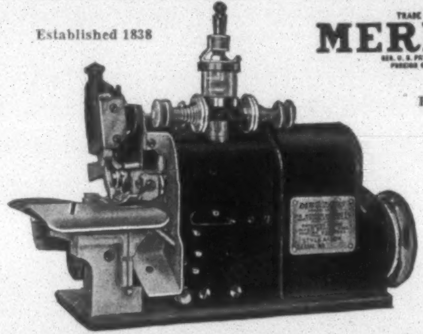

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Report On the Most Efficient Work Week

(*Continued from Page 18*)

accidents. Believe every one should have one day of rest in seven."

Absenteeism, as well as inefficiency, is the bane of the employer in any workweek in excess of 40 hours.

"While the problem of absenteeism may involve other factors than long hours," the survey found, "the evidence is clear that attendance becomes progressively worse with increasing hours. An increase in the rate of absenteeism was reported by some of the companies which have moved from a 40 to a 48-hour week, more by those on a slightly longer workweek, and invariably by those on a seven-day workweek.

"Most companies have found absence rates and turnover higher for women than for men, particularly in connection with the six-day week. This is felt to be due more to women's home responsibilities than to any physical inability to work as much as 48 hours a week. Some of the absences and quits frequently are due to regular household responsibilities that cannot be met if a woman is employed 48 hours a week."

Many companies reported that another cause for absenteeism and high turnover is the inability of new employees from other communities to find satisfactory housing accommodations to which to move their families. Such men invariably take a few days off each month to return to their families. The solution for the woman's problem of meeting household tasks as well as the male worker's problem of finding accommodations for himself and his family must be found soon, if war production is not to be impaired.

Recent Textile Patents To Carolinians

Recent patents to Carolinians relate mainly to textile subjects, according to Eaton & Brown, patent attorneys, Charlotte, N. C.

A. Dewey Carter, of Gastonia, N. C., was awarded a patent on a ring traveler in which openings are provided in the traveler and louvres or vanes extend outwardly from these slots and as the traveler moves around the ring air will be forced downwardly through the slots which will cool the traveler and will also blow lint from the ring. One form has slots and louvres on both sides of the traveler so as not only to clean and cool the ring but also to cause the air striking the vanes to have a leveling effect on the traveler.

Carl A. Rudisill, of Cherryville, N. C., was the recipient of a patent on a singeing machine in which individual means are provided for winding each thread onto a separate package and other individual means are provided for holding a broken thread out of contact with the singeing flame while it is being reunited while the other threads are being wound onto their packages. Remotely controlled means are provided for releasing the united thread and allowing it to come into contact with the singeing flame.

Walter Larkin of Fidelity Honored for Inventions

Fidelity Machine Co. announces that, at a meeting of the Board of Managers of the Franklin Institute, Philadelphia, Pa., held February 18, 1942, upon recommendation of the Committee on Science and the Arts, it was voted to award its senior inventor, Walter Larkin, a Certificate of Merit.

The report of the committee states:

"In consideration of his admirable machine designing involving the ingenious application of known mechanical movements to the invention of circular knitting machines of special types."

For a number of years, Medal Day Exercises have been held in the Hall of the Franklin Institute in Philadelphia at which time awards are given out at a dinner in honor of the recipients.

This year the Medal Day Exercises will take place on April 15th.

Walter Larkin is well known to the textile industry and more specifically that of the seamless knitting field. He has spent his entire life-time in this field and a total of twenty-seven inventions have been awarded to him in this country and in foreign countries, all of which have been assigned to the Fidelity Machine Co. in Philadelphia.

The inventions of particular interest and which represent outstanding development include the five-color yarn selector and knot tyer, taking any two predetermined yarns selected from five and joining them together ..... attachment for circular ribbers ..... the multi-design Jacquard circular rib knitting machine making possible the use of 120 yarns or colors vertically and 5 colors horizontally ..... the triple head weatherproof wire covering machine placing three reinforcement layers of cotton yarn on bare copper wire at a rate of speed five times greater than ever done before ..... the reinforcement of rubber hose for the higher speed manufacture of windshield tubing, garden hose, radiator hose and fuel line hose.

W. P. B. Alters Duck Conservation Rule

Washington, D. C.—To encourage the manufacturers of rugs and carpets, drapery and upholstery further to convert their facilities to the proudction of cotton duck, the W. P. B. has issued an amendment to the cotton duck conservation order M-91 releasing from all restrictions cotton duck of any width, weight or construction manufactured in rug or carpet mills and on looms heretofore producing drapery or upholstery.

Some of these already have substituted orders for duck and today's action enables all mills to obtain the necessary experience in the manufacture of duck to enable them to maintain the specifications of war contracts.

Wool and burlap, the primary materials used in the manufacture of rugs and carpets, are scarce and their allocation to rug and carpet mills has been sharply restricted. By converting to duck, mills will be able to continue in operations and will make duck available to the civilian market and will obtain experience in the manufacture of duck that will be of value if their capacity is needed to meet increasing defense requirements.

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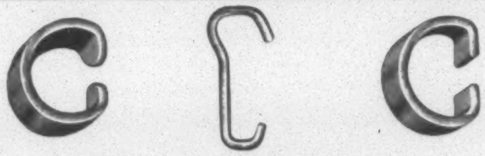

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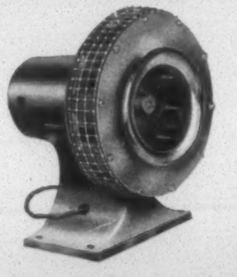

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A Blunt Discussion of Labor Relations

(*Continued from Page 10*)

that in addition to the two now existing dominant labor organizations, there seems to be in gestation a third almost ready to be born, indicate that their policies are under question among themselves.

There are many independent organizations and millions of workers who still believe in the individual freedom of each man to bargain for himself.

All of these statements lead to one point of interest. The employers of labor in times past committed certain industrial errors either in ignorance or through indifference. They were not satisfactorily corrected in the minds of labor. The workers wanted some relief so they went outside and there they met what has become to be known as organized labor and the so-called labor leader. There is no doubt but that as we look back over the field of conflict, some good has been accomplished. But as we look again, we can see for the permanent future a greater number of detrimental things for labor and society as a whole in its philosophy as it is now manifesting itself in its plans and program. The divisiveness, the class distinction, the class hatred, the political power, the totalitarian aspects and other factors make many students of social economics feel that, perhaps the labor movement, as it is being conducted today, has lost its original social plans in the march of time, and the demands of a free democratic society have outgrown it. It may be a factor of regress rather than a factor of progress.

Employers of labor had their day and in the application of social intelligence to their program, they seem to have failed. Then came the labor organizations with their panaceas and they have had their day and they seem to have failed. The evils of one have been acquired by the other in a new and an intensified form. Neither side has made a scientific approach to the subject. Labor relations have been studied only partially—economically and politically—the deep and abiding social implications of a free society have seemingly been omitted.

The employers and employees are now so class conscious and so hedged about with prejudices and government and extra-judicial regulations that it is impossible to establish an industrial relations policy observing all of the functions necessary for industrial harmony. The struggle, as it is now being motivated and directed, presents an impossible solution.

Every one knows and realizes that as time passes by, civilization and culture improve the general ethics of society. This is true not because there is an inevitable progress, but because there is always in every age or period a group of minds that carry the seeds of civilization and culture with increments on to the next period. This means that the employers of labor have now become more social minded and have a greater intelligence regarding their social responsibilities. In the whirling dervish of technical controls, these social needs cannot be properly expressed. They cannot break through the artificial and unintelligent barriers with which they are surrounded.

All of life moves in cycles or pendulum swings. This is an undisputed fact, regardless of whether or not it is a necessity. The employers of labor had an opportunity to control the social cycle of industrial relations and, according to the public, did not do a satisfactory job so in some instances it was turned over to the labor leaders and government officials, who have had their flashy days of social conflict, which instead of outlining a practical plan for social industrial relations, have only complicated the already serious problems.

It occurs to us that since the original causes for industrial unrest are found in the field of management, that management should now, in the light of its new information and motivations, be given an opportunity to show that it has become sensitive to social demands. The pendulum should swing back with as few controls as possible and management should catch it with the avowed determination that it will give to all factors of its industrial relations policies a thorough and scientific study employing research in whatever field may be necessary, and abide by its results.

Labor leaders cannot solve the problem of industrial relations. They do not know the causes or the cures. They have devised certain causes and cures which they display but they are not the original or basic causes. No hope for peaceful labor relations can be expected from labor leaders or labor unions.

The final solution of labor problems does not lie in legislation or extra-administrative agencies. The solution lies in the hearts and minds of people—in education and tolerance—a scientific approach to the human as well as the economic aspects of the question. The political aspect has no place in this subject but it will always be there as long as there are politicians and self-seekers.

This article has not been written as a chastisement for any one. It has tried to be fair and at the same time inject into the exposition a reasonable and practical approach to the perplexing problems of labor relations.

Draper Expects Cut in New Loom Output

Hopedale, Mass.—Last year, as in each of the three preceding years, Draper Corp. wrote down patents by $50,000, but while this write-down might be considered as part of indicated earnings "it was not so included in the calculations," it is reported in the company's annual statement, which, as noted, disclosed a net profit for $1,777,056.

In his annual report to stockholders, B. H. Bristow Draper, president, said:

"During the year our various departments were busier than ever before in the manufacture of new looms, repairs and accessories. Although we anticipate that our repair and accessory business will continue in large volume because of the tremendous activity of the textile mills, we have been told by the Government that our production of new complete textile machinery must be curtailed drastically shortly. In anticipation of this regulation we have for the last year been taking on increasing and ever larger amounts of work, both direct and indirect, for the Government.

"In 1941 we paid $5 a share in dividends. Reservations for taxes amounted to $6.80 a share, compared to $3.75 in the previous year. In addition, manufacturing costs, due largely to overtime operations, increased materially.

"On December 19, 1941, the employees were given a bonus aggregating approximately $250,000. Former employees now in the armed services were included in this disbursement."

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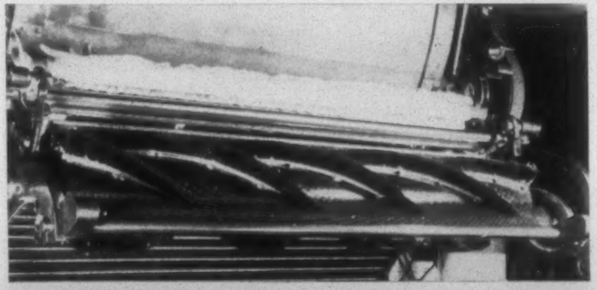
It's as simple as that to start an Order

WITH FULLERGRIPT you can realize a saving if you buy four preformed, spiraled, steel-backed brush strips. These can be quickly fastened to your flat-card wood cores by your own Maintenance Department. Thousands of flat cards in mills today have our durable, all-metal brush construction in use. Progressive mills are replacing old tufted constructions with dependable FULLERGRIPT.

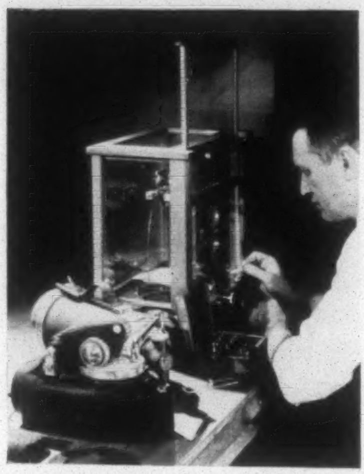


The FULLER BRUSH Company
Industrial Division, Dept. 8C
3584A MAIN STREET - HARTFORD, CONN.

TEXTILE BULLETIN'S SEMI-MONTHLY DIGEST *of* WHAT'S NEW *in* MILL EQUIPMENT, SUPPLIES, BOOKLETS

Abraser Vacuum Pickup

The Taber Instrument Corp., of North Tonawanda, N. C., has announced its improved Abraser Vacuum Pickup, Model HV-42, an accessory to the Taber Abraser standard method for measuring resistance to abrasion of surface finishes.



The primary function of the Vacuum Pickup is to prevent accumulation of abradings from interfering with the normal wear action of the Calibrase wheels. Its principal application is for the removal of abradings that may become imbedded in the weave of textile fabrics, also the fine powder from certain types of organic coatings that tend to cling to and build up on the face of the Calibrase wheels.

The Taber Abrasion Test Equipment and accessories are fully described in Bulletin 4012, which will be mailed upon request.

New Humidifier

Now available for textile mills, paper and printing plants and other industries where control of humidity is important in manufacturing, or for the storage of hygroscopic materials such as chemicals, leather, etc., is a new industrial humidifier just announced by E. T. Murphy, vice-president of Carrier Corp., in charge of marketing.

Available in two capacities, the Carrier Industrial Humidifiers will provide 4,800 or 6,150 cubic feet of humidified air per minute, and evaporate up to 96 pounds of water per hour.

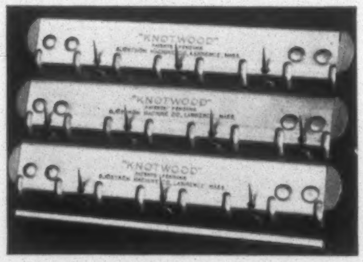
All details are presented in a descriptive publication (43G1) recently published by Carrier Corp., Syracuse, N. Y.

New Metallic Feeder Aprons

Sjostrom Machine Co., of Lawrence, Mass., has announced a new patented (U. S. Patent No. 2258035), "Knotwood" Metallic Feed Apron for pickers, dusters, blenders, carders, openers, etc. The aprons are made of special tough steel strips, linked together in chain form.

"Knotwood" Feeds are furnished plain or with spikes for automatic feeds. They are light, run clean, are made from special steel and have a positive drive. The fact that "Knotwood" Feeds cannot slip aids in uniform feeding of cotton, rayon staple fibre, wool, mixtures and other fibrous stock.

One of the chief advantages stressed by the manufacturer is that they are fireproof. Also that they require less power, need no attention and grease or dirt does not cling and choke up the spikes.



The teeth of the special driving sprocket engage the interlocking joints of each metallic slat. There is positively no slip and the feed apron works very easily.

Since the introduction of "Knotwood" feeders in 1941, Sjostrom Machine Co. reports hundreds of sales and repeat orders, and state that many of the largest mills in the South are equipping with these feeders.

E. W. Hollister, of Spartanburg, S. C., is the Southern representative for Sjostrom Machine Co.

Hard Sponge Rubber

B. F. Goodrich announcement that its laboratories have completed successful tests and are now ready to go into production of Ameripol Hard Sponge Rubber comes as a real innovation in synthetic rubber manufacturing.

All possible uses for this new synthetic hard rubber have not yet been explored, but among known uses is its suitability on specialized insulating and float jobs where an oilproof, waterproof and acidproof material is required. Specific data may be secured by writing direct to the B. F. Goodrich Co., 1247 South High street, Akron, Ohio.

Testing Company Publishes New Book

The United States Testing Co., Inc., has published, and is now distributing to its clients, a booklet titled "Testing in Modern Industry." The booklet features conversion tables and specification standards for textiles, chemicals, metals and other materials.

The Testing Company published its first book of tables some forty years ago and the many subsequent revised issues speak well of the usefulness of such testing tables. This new issue "Testing in Modern Industry" with its many new tables clearly shows the broadening in scope of the Testing Company's work in recent years.

Foxboro Issues New Pressure Recorder Catalog

The factual information contained in Foxboro's new Catalog 22-A is arranged so as to be of greatest time-saving convenience to the reader, in selecting the Pressure Recorder best suited to his particular needs.

The Foxboro line is well illustrated and described, covering instruments for the measurement and recording of industrial pressures of all kinds, in ranges from 1 inch of water to 20,000 pounds. A complete list of standard ranges is given, accompanied by full-size reproductions of specimen charts. Catalog numbers have been assigned to instruments of standard design and to standard accessory units, to facilitate ordering.

The Foxboro Co., Foxboro, Mass., will send copies of the new catalog, 22-A, to users of industrial Pressure Recorder, on request.

Leather Belt Conservation

Identifying itself with conservation demands advocated by Government authorities as essential to war success, E. F. Houghton & Co., manufacturers of Vim Tred and Okay Tred Leather Belting, has inaugurated a series of informative advertisements designed to instruct belting maintenance men in the best methods of prolonging belt life. The first advertisement in the series appeared recently in trade publications, and will continue through succeeding months.

Proceeding on the theory that everything the Nation is able to conserve is actually an addition to its production, advertisements key-note the fact that preventable wear, like waste, is the arch enemy of production and an unpardonable sin in days such as these. They give many concrete suggestions for prevention of wear, power transmission cost reduction and down-time curtailment.

Reason for the great need of correct installation of belts is explained and many practical suggestions offered. Other subjects covered include pivoted motor-bases, tension, pulleys, cementing, dressing, slippage, repairs and storage.

Supplementing the advertisements E. F. Houghton & Co. has published an illustrated booklet entitled "How to Make *Your* Belts Last Longer," summarizing the information contained in the complete series of advertisements. It is couched in non-technical language and contains reference data and formulae. It is believed that the booklet will prove of great value to belt maintenance men for reference purposes. A copy will be forwarded without charge on request.

Changing Over Quickly To Various War Needs

A very large and complete broadside and wall hanger combined has just been issued by the Steel Heddle Mfg. Co., general offices and plant, 2100 W. Allegheny Ave., Philadelphia, Pa., in which are attractively illustrated all the important harness equipment needed in weaving war materials.

A complete list of most of the textiles being used for war purposes is also given, many of which are illustrated.

This huge contribution to help the mills in their needs of the day has been gotten up in patriotic style in red, white and blue.

It is so designed to permit its being hung up on the wall for quick reference.

The complete line of heddles (suitable for each of the various fabrics to be woven) is illustrated, as well as frames, selvage harness, reeds, combs, shuttles and accessories.

The Steel Heddle will send a copy to any one writing them on their mill's letterhead.

Price and Priority Index Available

Official texts of over 600 OPA and WPB price schedules, limitation orders, allocation rulings, preference rating, amendments and interpretations have just been made available by the New York Journal of Commerce for distribution among the nation's merchants and manufacturers. A Price and Priority Index of all existing government regulations covering a wide product range from acetone to zinc has been compiled for handy reference purposes.

OPA price schedules were inaugurated in the machine tool industry over a year ago and are now in effect on well over a hundred products. "M" orders regulating the flow of materials came along shortly afterward and remain in effect despite the abolishing of the OPM. Limitation orders restricting the output of manufactured goods were first applied on motor trucks in August of last year. Adjustment to a wartime economy hit its peak in mid-February when as many as 18 different orders were issued by the various government agencies on a single business day.

Individual texts as published in the columns of the Journal of Commerce are still available in single copies or bulk quantities. Copies of the complete index may be had without charge by addressing the New York Journal of Commerce at 63 Park Row, New York.

"How To Run a Lathe"

To further increase the effectiveness of their lathe operators' handbook for defense training purposes, the South Bend Lathe Works has just issued the 41st edition of this popular book, "How To Run a Lathe." A number of changes in text material and illustrations have been made since the previous edition was printed in 1941.

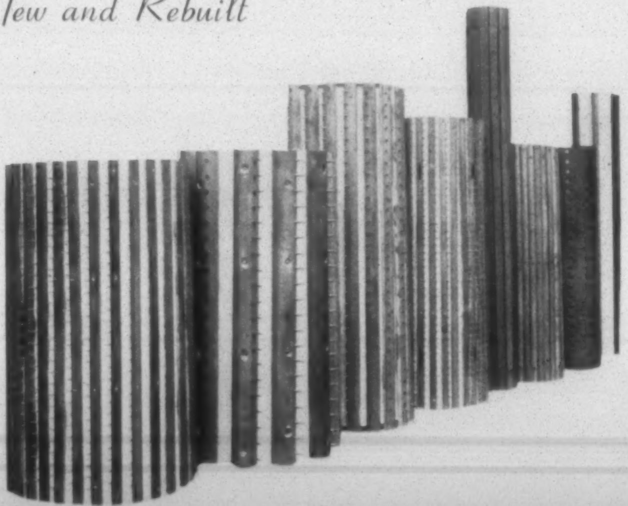
This book contains the latest information on the operation and care of metal working lathes. Covers such subjects as the operation of the lathe units, grinding cutter bits, making accurate measurements, plain turning, chuck work, taper turning, boring, drilling, reaming, tapping, cutting screw threads, reference tables, etc. Written clearly and concisely, it is widely used as a shop text in schools and apprentice training courses. This edition contains 128 pages —5⅛x8 inches, and over 365 illustrations. Copies are available for 25c postpaid. Write to South Bend Lathe Works, Department T-3, South Bend, Ind.

PICKER APRONS—*New and Rebuilt*

We suggest that you have your aprons either replaced or repaired now. Copper rivets, burrs, steel spikes and pins are harder to get each week, so telephone, wire or write us your needs. Ship your aprons to us for repair. Our motto, "Better Built Picker Aprons" guarantees your satisfaction.

C. L. Upchurch & Sons, Inc.

P. O. Box 267 Phone L. D. 25
Athens, Ga.



Southern Sources of Supply

For Equipment, Parts, Material, Service

Following are the addresses of Southern plants, warehouses, offices, and representatives of manufacturers of textile equipment and supplies who advertise regularly in TEXTILE BULLETIN. We realize that operating executives are frequently in urgent need of information, service, equipment, parts and materials, and believe this guide will prove of real value to our subscribers.

ACME STEEL CO., 2838 Archer Ave., Chicago, Ill. Sou. Office and Warehouse, 603 Stewart Ave., S.W., Atlanta, Ga., F. H. Webb, Dist. Mgr. Sou. Sales Reps.: C. A. Carrell, 523 Clairmont Ave., Decatur, Ga., Phone Dearborn 6267; G. R. Easley, 107 Manly St., Greenville S. C., Phone 1610; William G. Polley, 937 Cherokee Lane, Signal Mountain, Tenn., Phone Chattanooga 8-2635; John C. Brill, 309 Magazine St., New Orleans, La., Phone Magnolia 5859. Warehouses at Atlanta, Ga., Greenville, S. C., New Orleans, La.

AKRON BELTING CO., THE, Akron, O. Sou. Reps.: The Akron Belting Co., 15 Augusta St., Greenville, S. C.; The Akron Belting Co., 406 S 2nd St., Memphis, Tenn.

ALLEN CO., 440 River Road, New Bedford, Mass. Sou. Repr.: L. E. Wooten, Fort Mill, S. C.

AMERICAN CYANAMID & CHEMICAL CORP., 30 Rockefeller Plaza, New York City. Sou. Office and Warehouse, Wilkinson Blvd., Charlotte, N. C., Hugh Puckett, Sou. Sales Mgr. Reps., John D. Hunter, E. H. Driver, Paul F. Haddock, Charlotte Office; E. J. Adams, 1404 S. 22nd St., Birmingham, Ala.; Jack B. Button, 610 N. Mendenhall St., Greensboro, N. C.; C. B. Suttle, Jr., 423 Clairmont Ave., Decatur, Ga.; K. E. Youngchild, 10 South St., Mobile, Ala.

AMERICAN MOISTENING CO., Providence, R. I. Sou. Plants, Charlotte, N. C., and Atlanta, Ga.

AMERICAN VISCOSE CO., 350 Fifth Ave., New York City. Sou. Office, Johnston Bldg., Charlotte, N. C. Harry L. Dalton, Mgr.

ARKANSAS CO., Inc., P. O. Box 210, Newark, N. J. Sou. Repr.: Jasper M. Brown, 1204 Greenwood Cliff, Charlotte, N. C.

ARMSTRONG CORK CO., Industrial Div., Textile Products Section, Lancaster, Pa. Sou. Office, 33 Norwood Place, Greenville, S. C. J. V. Ashley, Sou. Dist. Mgr.

ARNOLD, HOFFMAN & CO., Inc., Providence, R. I. Chester L. Eddy, Asst. Sales Mgr., 903-904 Woodside Bldg., Greenville, S. C. Sou. Reps.: W. Chester Cobb, Erwin Laxton and Reid Tull, Charlotte, N. C., office; John H. Graham, Box 904, Greenville, S. C.; Harold T. Buck, 1615 12th St., Columbus, Ga.; John R. Brown, Trussville, Ala.

ASHWORTH BROS., Inc., Charlotte, N. C. Sou. Offices, 44-A Norwood Place, Greenville, S. C.; 215 Central Ave., S.W., Atlanta, Ga.; Texas Rep.: Textile Supply Co., Dallas, Tex.

ATWOOD MACHINE CO., Stonington, Conn. Sou. Rep.: Fred Sails, Johnston Bldg., Charlotte, N. C.

AUFFMORDT & CO., C. A., 468 Fourth Ave., New York City. Sou. Rep.: George B. Wilkinson, 613 Johnston Bldg., Charlotte, N. C.

BAHNSON CO., THE, Winston-Salem, N. C.

BANCROFT BELTING CO., Boston, Mass. Warehouse and Sou. Distributor, Carolina Supply Co., Greenville, S. C.

BARBER-COLMAN CO., Rockford, Ill. Sou. Office, 31 W. McBee Ave., Greenville, S. C., J. H. Spencer, Mgr.

BARKLEY MACHINE WORKS, Gastonia, N. C.

BARNES TEXTILE ASSOCIATES, Inc., 10 High St., Boston, Mass. Sou. Office, 511 Johnston Bldg., Charlotte, N. C.

BAY STATE TEXTILE CO., 220 Hartwell St., Fall River, Mass. N. C. Agt., John Graham Webb, P. O. Box 344, Hillsboro, N. C., Phone 127-B.

BECCO SALES CORP., Buffalo, N. Y. Sou. Reps.: J. D. Quern and D. S. Quern, 1930 Harris Road, Charlotte, N. C.

BEST & CO., Inc., EDWARD H., Boston, Mass. Sou. Rep.: W. C. Hames, 185 Pinecrest Ave., Decatur, Ga., Phone Dearborn 5974; Ralph Gossett, William J. Moore, 15 Augusta St., Greenville, S. C., Phone 150.

BORNE, SCRYMSER CO., Works and Offices, 632 S. Front St., Elizabeth, N. J.; Warehouse, 815 W. Morehead St., Charlotte, N. C. Sou. Mgr., H. L. Siever, Charlotte, N. C. Reps.: W. B. Uhler, Spartanburg, S. C.; R. C. Young, Charlotte, N. C.; John Ferguson, LaGrange, Ga.

BRADLEY FLYER & REPAIR CO., 1318 W. Second Ave., Gastonia, N. C.

BREWERTON, E. H., 1019 Woodside Bldg., Greenville, S. C.

BROOKLYN PERFEX CORP., Brooklyn, N. Y. Sou. Repr.: John Batson, Box 841, Greenville, S. C.

BROWN CO., THE DAVID, Lawrence, Mass. Sou. Reps.: Greenville, S. C., Ralph Gossett and Wm. J. Moore; Griffin, Ga., Belton C. Plowden; Dallas, Tex., Russell A. Singleton Co., Inc.; Gastonia, N. C., Gastonia Mill Supply Co.; Chattanooga, Tenn., James Supply Co.; Spartanburg, S. C., Montgomery & Crawford.

BRYANT ELECTRIC CO., 625-27 E. Franklin Ave., Gastonia, N. C.

BURKART-SCHIER CHEMICAL CO., Chattanooga, Tenn. C. A. Schier, W. A. Bentel, W. J. Kelly, Jr., George S. McCarty, T. A. Martin, George Rodgers, care Burkart-Schier Chemical Co., Chattanooga, Tenn.; H. V. Wells, care Burkart-Schier Chemical Co., Nashville, Tenn.; Lawrence Newman, Claude V. Day, care Burkart-Schier Chemical Co., Knoxville, Tenn.; J. A. Brittain, 845 S. 41st St., Birmingham, Ala.; Nelson A. Fisher, 1540 Elmdale Ave., Chicago, Ill.

CAROLINA REFRACTORIES CO., Hartsville, S. C.

CARTER TRAVELER CO., Gastonia, N. C. R. D. Hughes Sales Co., 2106 S. Lamar St., Dallas, Tex., Texas and Arkansas; Eastern Rep. (including Canada), C. E. Herrick, 44 Franklin St., Providence, R. I.; European Rep., Mellor, Bromley & Co., Ltd., Leicester, England.

CHARLOTTE CHEMICAL LABORATORIES, Inc., Charlotte, N. C. Peter S. Gilchrist, Jr., Rep.

CHARLOTTE LEATHER BELTING CO., Charlotte, N. C. J. E. McKenna, Charlotte, N. C.; J. E. Beattie, Box 82, Greenville, S. C.; J. L. Harkey, Supt., Charlotte, N. C.

CIBA CO., Inc., Greenwich and Morton Sts., New York City. Sou. Offices and Warehouses, Charlotte, N. C.

CLINTON CO., Clinton, Iowa. Sou. Reps.: Luther Knowles, Box 127, Phone 2-2486, Charlotte, N. C.; Grady Gilbert, Box 342, Phone 3192, Concord, N. C.; Clinton Sales Co., Inc., Geo. B. Moore, Box 481, Phone 822, Spartanburg, S. C.; Boyce L. Estes, Box 325, Phone 469, LaGrange, Ga.; Gordon W. Enloe, P. O. Box 351, Gadsden, Ala.; Harold P. Goller, 900 Woodside Bldg., Tel. 8718, Greenville, S. C. Stocks carried at Carolina Transfer and Storage Co., Charlotte, N. C.; Consolidated Brokerage Co., Greenville, S. C.; Bonded Service Warehouse, Atlanta, Ga.; Textile Products Distributing Co., Rock Hill, S. C.; Industrial Chemicals, Roanoke Rapids, N. C.

COCKER MACHINE & FOUNDRY CO., Gastonia, N. C.

COLE MFG. CO., R. D., Newnan, Ga.

CORN PRODUCTS REFINING CO., 17 Battery Place, New York City. Corn Products Sales Co., Greenville, S. C., John R. White, Mgr.; Corn Products Sales Co., Montgomery Bldg., Spartanburg, S. C., J. Canty Alexander, Asst. Sou. Mgr.; Corn Products Sales Co. (Mill and Paper Starch Div.), Hurt Bldg., Atlanta, Ga., C. G. Stover, Mgr.; Corn Products Sales Co., 824-25 Southeastern Bldg., Greensboro, N. C., W. R. Joyner, Mgr.; Corn Products Sales Co., Comer Bldg., Birmingham, Ala., L. H. Kelley, Mgr. Stocks carried at convenient points.

CURTIS & MARBLE MACHINE CO., 72 Cambridge St., Worcester, Mass. Sou. Reps.: Greenville, S. C., 1000 Woodside Bldg., W. F. Woodward, Tel. 8336; Dallas, Tex., O. T. Daniels, care Textile Supply Co.; Philadelphia, Pa., 794 Drexel Bldg., J. A. Fitzsimmons; New York, N. Y., 200 Fifth Ave., F. C. Bryant.

CUTLER, ROGER W., 141 Milk St., Boston, Mass. Sou. Office, Woodside Bldg., Greenville, S. C. Sou. Agts.: M. Bradford Hodges, 161 Spring St., N.W., Atlanta, Ga.; Jesse Hodges, 1336 East Morehead St., Charlotte, N. C.; Byrd Miller, Woodside Bldg., Greenville, S. C.

DARY RING TRAVELER CO., Taunton, Mass. Sou. Rep.: John E. Humphries, P. O. Box 843, Greenville, S. C.; John H. O'Neill, P. O. Box 720, Atlanta, Ga.; H. Reid Lockman, P. O. Box 515, Spartanburg, S. C.

DAYTON RUBBER MFG. CO., Dayton, O. Sou. Reps.: William L. Morgan, P. O. Box 846, Greenville, S. C.; J. O. Cole, P. O. Box 846, Greenville, S. C.; Thomas W. Meighan, 1149 St. Charles Place, Atlanta, Ga. Sou. Jobbers: Greenville Textile Supply Co., Greenville Belting Co., Greenville, S. C.; Textile Mill Supply Co., Charlotte, N. C.; Odell Mill Supply Co., Greensboro, N. C.; Young & Van Supply Co., Birmingham, Ala.; Industrial Supply, Inc., LaGrange, Ga.; Textile Supply Co., Dallas, Tex.; T. A. Sizemore, 525 Grove St., Salisbury, N. C.

DETERGENT PRODUCTS CO., 494 Spring St., N.W., Atlanta, Ga. Offices at: Columbia, S. C., Raleigh, N. C., Texarkana, Ark., Columbus, Ga.

DODENHOFF CO., W. D., 619 Rutherford St., Greenville, S. C. Sou. Reps.: John Ellison, Box 91, Greensboro, N. C.; Otis A. Zachary, Box 436, Atlanta, Ga.; Spencer W. Sparks, Chattanooga Bank Bldg., Chattanooga, Tenn.; T. Hunter Long, Box 485, Tampa, Fla.; O. L. Carter, 619 Rutherford St., Greenville, S. C. New England Sales Rep.; Herbert A. Derry, 94 Howard St., Melrose, Mass.

DRAPER CORPORATION, Hopedale, Mass. Sou. Offices and Warehouses, Spartanburg, S. C., Clare H. Draper, Jr.; Atlanta, Ga., 242 Forsyth St., S.W., W. M. Mitchell.

DU PONT DE NEMOURS & CO., Inc., E. I., Organic Chemicals Dept., Dyestuffs and Fine Chemicals Div., Wilmington, Del. John L. Dabbs, Sou. Sales Mgr.; D. C. Newman, Acting Sou. Sales Mgr.; J. D. Sandridge, Asst. Sou. Sales Mgr.; E. P. Davidson, Asst. Mgr. Technical. Sou. Warehouses, 414 S. Church St., Charlotte, N. C. Reps.: C. H. Asbury, H. B. Constable, J. P. Franklin, J. F. Gardner, L. E. Green, M. D. Haney, W. R. Ivey, S. A. Pettus, A. W. Picken, N. R. Vieira, Charlotte Office; J. T. McGregor, Jr., James A. Kidd, 1935 Jefferson Standard Bldg., Greensboro, N. C.; John L. Dabbs, Jr., G. H. Boyd, 804 Provident Bldg., Chattanooga, Tenn.; R. D. Sloan, T. R. Johnson, Greenville, S. C.; W. F. Crayton, Adam Fisher, Jr., W. A. Howard, Columbus, Ga.; J. A. Franklin, Augusta, Ga.; Tom Taylor, Newnan, Ga.

DU PONT DE NEMOURS & CO., Inc., E. I., The R. & H. Chemicals Dept. Main Office, Wilmington, Del.; Charlotte Office, 414 S. Church St., LeRoy Kennette, Dist. Sales Mgr. Reps.: J. L. Moore, Technical Man; Penn R. Lindsay, Salesman, 414 S. Church St.; N. P. Arnold, 2386 Alston Dr., Atlanta, Ga., Technical Service Man; R. C. Cochrane, 356 Pine Tree Drive, Atlanta, Ga., Salesman; O. G. McCullers, McDaniel Heights Apt., Greenville, S. C., Tech. Repr.

EAGLE ROLLER REPAIR WORKS, Greenville, S. C.

EATON, PAUL B., 218 Johnston Bldg., Charlotte, N. C.

EMMONS LOOM HARNESS CO., Lawrence, Mass. Sou. Plant, 118½ W. Fourth St., Charlotte, N. C., George Field, Mgr.; Clifton E. Watson, Mgr. Sou. Sales. Wm. S. Taylor, Supt. Charlotte Plant, Box 2036, Tel. 3-7508; Arthur W. Harris, Harris Mfg. Co., Agt., P. O. Box 1982, Phone Main 2648, Atlanta, Ga.; Alvin Braley, Southwest Supply Co., Agt., P. O. Box 286, Phone 170, Itasca, Tex.

ENGINEERING SALES CO., 217 Builders' Bldg., Charlotte, N. C., and Allen Bldg., Greenville, S. C.; S. R. and V. G. Brookshire.

FABREEKA PRODUCTS CO., 222 Summer St., Boston, Mass. Sou. Repr.: Wm. F. Lancaster, 676 S. Church St., Spartanburg, S. C.

FIDELITY MACHINE CO., 3908-18 Frankford Ave., Philadelphia, Pa. Sou. Reps.: John E. Fox, Liberty Life Ins. Bldg., Charlotte, N. C.; R. C. Aycock, 911 Provident Bldg., Chattanooga, Tenn.

FISKE BROS. REFINING CO., LUBRIPLATE DIV., 129 Lockwood St., Newark, N. J. Sou. Repr.: J. Fred Welch, 1317 Lafayette Ave., Charlotte, N. C.; A. L. Day, 631 Spring St., N.W., Atlanta, Ga. Sou. Distributors: Tidewater Supply Co., P. O. Box 839, Norfolk, Va.; Tidewater Supply Co., Roanoke, Va.; Tidewater Supply Co., P. O. Box 212, Asheville, N. C.; Tidewater Supply Co., Columbia, S. C.; Chears Co., 631 Spring St., N.W., Atlanta, Ga.; Gastonia Mill Supply Co., Gastonia, N. C.; Jefferson Brick Supply Co., 2220 First Ave. South, Birmingham, Ala.; Knoxville Belting & Supply Co., 408 W. Jackson Ave., Knoxville, Tenn.; Noland Co., 115 Market St., Chattanooga, Tenn.; Turner Supply Co., St. Louis and Commerce Sts., Mobile, Ala.; Kennedy & Bowden Machine Co., 134 Third Ave., North, Nashville, Tenn.

FOSTER MACHINE CO., Westfield, Mass. Sou. Offices, 509 Johnston Bldg., Charlotte, N. C.

FRANKLIN PROCESS CO., Providence, R. I. Sou. Plants, Southern Franklin Process Co., Greenville, S. C.; Central Franklin Process Co., Chattanooga, Tenn.

FULBRIGHT LABORATORIES, Inc., 205-6-7 Latonia Bldg., Charlotte, N. C. C. O. Fulbright.

FULTON BAG & COTTON MILLS, Atlanta, Ga.

GASTONIA BELTING & SUPPLY CO., Gastonia, N. C.

GASTONIA BRUSH CO., Gastonia, N. C.

GENERAL COAL CO., 1217 Johnston Bldg., Charlotte, N. C., J. W. Lassiter, Sou. Sales Mgr.; Frank W. Reagan, Asst. Sou. Sales Mgr. Reps.: G. P. W. Black, Apt. A-2, Virginia Apts., Greenville, S. C.; H. G. Thompson, 97 Tacoma Circle, Asheville, N. C.; Guy H. Sowards, 421 N. Blount St., Raleigh, N. C.; Frank B. Crusan, 210 E. Franklin St., Office No. 5, Richmond, Va.; Dudley H. R. Wigg, 633 Wainwright Bldg., Norfolk, Va.; W. A. Counts, Res. Mgr., Law and Commerce Bldg., Bluefield, W. Va.; Dave B. Smith, Charlotte, N. C.; Combustion Engineer, E. H. Chapman, Charlotte, N. C.

GENERAL DYESTUFF CORP., 435 Hudson St., New York City. Sou. Office and Warehouse, 2459 Wilkinson Blvd., Charlotte, N. C., B. A. Stigen, Mgr.

GEORGE MACHINE WORKS, W. J., Spartanburg, S. C.

GOSSETT MACHINE WORKS, Franklin Ave., Ext., Gastonia, N. C.

GREENSBORO LOOM REED CO., Greensboro, N. C. Phone 5678. Geo. A. McFetters, Mgr. Phone 2-0205. A. A. "Red" Brame, Repr.

GREENVILLE BELTING CO., Greenville, S. C.

GULF OIL CORPORATION OF PA., Pittsburgh, Pa. Division Offices: Atlanta, Ga.—A. M. Wright, Greenville, S. C.; W. G. Robertson, Jr., Spartanburg, S. C.; J. H. Hooten, Gastonia, N. C.; R. G. Burkhalter, Charlotte, N. C.; G. P. King, Jr., Augusta, Ga.; Boston, Mass.; New York, N. Y.; Philadelphia, Pa.; New Orleans, La.; Houston, Tex.; Louisville, Ky.; Toledo, O.

H & B AMERICAN MACHINE CO., Pawtucket, R. I. Sou. Offices, 815 The Citizens and Southern National Bank Bldg., Atlanta, Ga.; J. C. Martin, Agt.; Johnston Bldg., Charlotte, N. C., Elmer J. McVey, Mgr.; Fritz Zweifel, Fred Dickinson, Jim Miller, sales and service representatives.

H & P SPOOL & BOBBIN CO., Lawrence, Mass. Sou. Distributors: Textile Mill Supply Co., Charlotte, N. C., Tel. 5125-5126; Columbus Iron Works, Columbus, Ga.; Textile Supply Co., Dallas, Tex., Tel. 7-4729.

HART PRODUCTS CORP., 1440 Broadway, New York City. Sou. Mgr., Charles C. Clark, Box 274, Spartanburg, S. C. Sales Rep.: L. M. Boes, Box 517, Charlotte, N. C.

HOLLISTER, E. W., Box 721, Spartanburg, S. C. Distributor in N. C. and S. C. for The Merrow Machine Co. and American Safety Table Co. Merrow parts and supplies stocked at Spartanburg.

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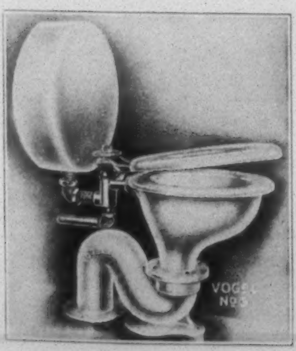

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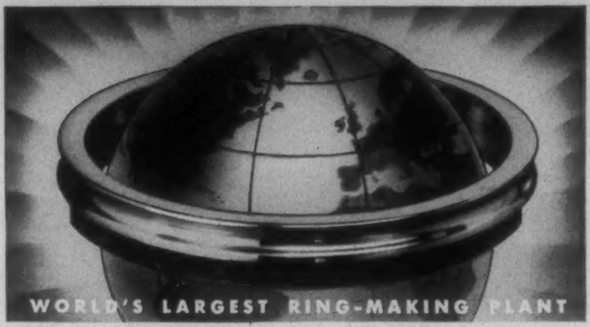

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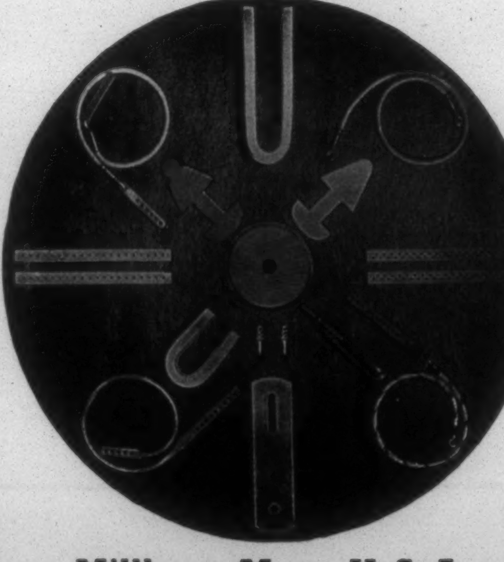

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